



JRC SCIENCE FOR POLICY REPORT

Gaps and challenges in the knowledge of migration and demography:

Proposals for new approaches and solutions

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JRC Task Force on Migration and Demography

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Table of Contents

Executive Summary	4
Methodology	10
I. Irregular migration.....	12
a. Additional: Access to and quality of data	12
b. Root causes of irregular migration.....	18
<i>i. Environment</i>	19
<i>ii Conflicts</i>	24
<i>iii. Economy</i>	27
c. Fight against smuggling and human trafficking.....	30
d. Return.....	37
II. Border management	42
III. Asylum and protection.....	47
a. Common European Asylum System (CEAS)	47
b. Additional: Unaccompanied Minors.....	52
IV. Legal migration.....	55
a. Additional: access to and quality of data	55
b. Additional: Demography	59
c. Visa Policy	62
d. Effective integration.....	66
e. Maximising the development benefits of countries of origin.....	72
f. Additional: The economic effects of migration.....	76
References.....	80
Annexes	93
Annex I: Table summary of challenges and gaps; approaches and solutions	93
Annex II: Preliminary inventory of migration data and data sources	98

Executive Summary

*“Immigration is not a problem to solve,
it is a human reality that needs more thought than we thought till now”*
Ambassador Swing, Director General of the International Organisation for Migration,
EMN & the Dutch Ministry of Security and Justice European Conference 2016
Amsterdam, 12th January 2016,

Following the European refugee and migrant crisis in 2015, the Director General of the Joint Research Centre (JRC) established on 11 September 2015 a 'JRC Task Force on Migration and Demography'. Its aim was to propose a way forward to support the Commission services in a structured and coherent way in their response to the management of the refugee crisis specifically and migration more generally. One of the tasks given to the Task Force (task 5) was to "identify approaches and solutions to overcome gaps and challenges including poor data, inadequate models, insufficient information sharing, inaccessible, non-comparable and fragmented knowledge affecting the community working on migration and demography in the EU; this includes a scanning of the activities and output of competent bodies outside the JRC". This report describes the outcome of this exercise carried out in early 2016.

After the Task Force finished its activities and as a direct follow-up to its work, the European Commission's Knowledge Centre on Migration and Demography (KCMD) was launched on 20 June 2016. Its first knowledge management activities addressed several gaps that are highlighted in this report by developing tools such as the KCMD Migration Data Catalogue and Dynamic Data Hub, Migration Profiles, maps of migrant communities in cities, and an inventory of Commission and EU agencies activities related to migration. Furthermore, the KCMD is working towards an EU Policy on Migration Data to identify shortcomings in migration and demography data and to suggest improvements, taking into account costs and benefits associated. Linked to this initiative, the KCMD is identifying big data and alternative data sources that hold the biggest promise for informed policymaking on migration and options to advance in the use of privately held data for the public good.

In the context of this report, the seminal policy document for migration in the short, medium and long-term is the European Agenda on Migration (the Agenda). The Agenda explicitly highlights the need for more and better use of information in the areas of smuggling, return, root causes of irregular migration, border management and job matching. This report considers the wider policy and academic debates of migration and demography, incorporating the Agenda's structure, to better understand the knowledge in this quickly evolving, cross-cutting and at times nebulous topic. In order to fully understand the migration phenomena, it is important to look at it from many perspectives: the academic debate, the policy challenges and the data gaps. This report aims to achieve such a daunting and difficult task in order to assist policy makers and relevant stakeholders to be more informed and plan at best future researches.

The report has identified a number of gaps and challenges for those working on migration and demography. The executive summary presents four of the most prominent challenges and matches them with some proposals in terms of approaches and solutions. A table summarising the gaps and challenges, in addition to the proposed approaches and solutions, is available in

Annex 1. DG JRC, as the science and knowledge service of the Commission, is in a unique position to provide added value in the goal of filling some of these gaps.

1. Challenge: Facing new types of migration

Migration has become far more complex in recent years. A twofold process can be observed: first, the terminology is becoming more nuanced, moving from the term 'migration' to '**mobility**'. Rather than being permanent and one-way, it involves a number of intermediate steps, and it is often considered (from both migrants and countries of destination) as a short-term experience. This fluid nature, already present in global migration literature for more than ten years now, cannot be ignored. Second, the EU is affected in a relatively unprecedented way, by migration that is more complex: different geographies and forced nature of migration mean more "mixed" migration flow. The increase of secondary movements and the inherent difficulty in tracing them is one concrete example of the changes we are witnessing nowadays.

The policy response to the migration flow is hampered by the difficulty in identifying what type of migrant is entering the EU: **definitions** therefore are not only relevant in terms of scientific analysis but also with regards to the specific legislative or policy instrument that applies to each individual migrant. Asylum seekers, refugees, internally displaced persons, victims of trafficking, smuggling migrants, stranded migrants, irregular migrants are not only difficult to identify in a mixed migration flow for data collection, but sometimes their definition is not clear enough to allow for such an identification in the first place. For example, the conflation of a migrant being smuggled to that of being trafficked causes difficulties in separating one from the other in data collection, or the lack of an agreed definition of what constitutes a migrant makes it difficult to collect information on return migrants. Furthermore, a migrant may pass through more than one circumstance during his or her trajectory: e.g. going from being trafficked to being an asylum seeker to being a returnee.

Therefore, this emerging challenge makes effective and timely responses demanding. In order to develop policies to address today's challenges, more use of research and anticipation of future needs and trends is of great importance. **Some of the yet under-developed research areas** identified in the report are: migration and climate change, the long-term integration of return migrants in their country of return, social cohesion and the monitoring of public opinion on migrants, migration and welfare state; social remittances, in addition to the impact of remittances on developing countries.

Approaches and solutions

- *Promote international cooperation to use harmonised definitions;*
- *Standardisation in the application of definitions; including with regular capacity building activities on data collection (e.g. on identifying victims of trafficking) or with pro-active dissemination of tools developed at European and international level;*
- *Commit to study and fill the research gaps in the different mentioned areas;*

- *JRC is already involved in the development of an EU Migration Index to propose a quantitative approach on push and pull factors in migration studies.*

2. Challenge: Availability of good quality and timely data is needed

For several years, efforts have been made for better data collection. One of the main achievements has been the multiplication of **online data portals** (e.g. UNHCR, IOM, UNPD, OECD, EUROSTAT), which allow for maps and specific datasets to be downloaded for further analysis. Annex 2 presents a **first inventory of migration data available**, as summarised in Table 1. It shows that more data are available for legal migration and integration, while data on “dark figures” or unreported figures are more difficult to obtain and are often partial or incomplete at global and regional level. Other challenges with the latter concern their collection and data protection matters. Indeed, for topics such as smuggling, human trafficking or border management, reports rather than databases are more often available.

Furthermore, looking at data limitations has brought to light that many international and EU-level datasets and sources depend on the same set of national data, such as population registries, census data, information from immigration authorities.

Table 1: Inventory of migration data and data sources by coverage

Pillar / Section	International	EU	Total
I. IRREGULAR MIGRATION			27
Ia - Access to data	2	5	8
Ib - Root causes	5	1	6
Ic - Smuggling and THB	6	2	8
Id – Return	2	3	5
II - BORDER MANAGEMENT		4	4
III. ASYLUM & PROTECTION			11
IIIa – CEAS	2	6	8
IIIb - Unaccompanied minors		3	3
IV. LEGAL MIGRATION			38
IVa - Access to data	8	3	11
IVb – Demography	4	2	6
IVc – Visa		2	2
IVd – Integration	6	5	11
IVe - Maximising development for countries of origin	2		2
IVf - Economic effects country of destination	2	4	6
Total	39	40	79

Source: Task Force on Migration, Annex 2

What appears to be most pressing to policy makers is up-to-date data, particularly in fast changing situations. However, here lies a **conundrum**: does one refer to timely yet reduced

quality data or accurate yet untimely data? When providing objective, evidenced-based advice to inform policy makers, caveats on the reliability of the data and their subsequent uncertainties and consequences are necessary.

Some migration studies often **suffer from a lack of relevant operational data**: such as the precise numbers of visa over-stayers; appropriate biometric test data for future technical systems to be deployed; secondary movements; migration drivers; data on return migrants; socio-economic data regarding the migrants who are entering the EU; data on unaccompanied minors; and disaggregation of the data at local level. In general, there is little information on migrants beyond their age, nationality and gender. This situation still gives rise to simplified stereotypes on asylum seekers and migrants in general; stereotypes that dominate public opinion following political debates and critical events. The more nuanced information that can be collected, the better policy makers are at making tailored and sustainable policy decisions.

Approaches and solutions

- *Produce a review of available data and update it regularly, with the inclusion of critical analysis and quality checks;*
- *Develop "best data sets" in the case of the environment – migration nexus or concerning smuggling and human trafficking, to give a more accurate picture of the data;*
- *Form partnerships and observatories at EU level to produce data in a structured and coherent way and increase its quality (e.g. in asylum, demography, border management, health);*
- *Enhance cooperation between the main players in data collection, e.g. Eurostat, OECD, FRONTEX, IOM and UNHCR to increase knowledge;*
- *Promote data transparency and regular capacity building activities on data collection.*

3. Challenge: New methodologies and a higher degree of data comparability

Perhaps the starting point in addressing this challenge is to acknowledge that different definitions leads to different methods of collection. **Comparability of data** is therefore hard to achieve. Additional difficulties behind comparability are short timeframes and limited geographic coverage; small samples sizes that are not necessary representative of the entire population; fragmented data; and risks of double counting. Moreover, there can be many stakeholders involved in collecting data, which is not easy to synergise (e.g. regarding conflicts as driver of migration; or trafficking and smuggling).

On the international and EU level, much progress has been done to improve the comparability of data thanks to Eurostat, OECD and the UN. However, comparability is not ensured for all data, for instance, population data is collected at national and not at EU level; the OECD may provide a wealth of information for its member states, but there are difficulties retrieving data from the non-member states.

The **methodology used may not be able to capture enough information** to allow meaningful analysis and provide a detailed picture of the circumstances. For instance, quantitative data appears to be most favoured by policy makers, yet qualitative data is just as crucial (e.g. in the case of asylum, demography and integration). Models analysing economic drivers for migration fail to capture the complexity of social behaviour and individual choice in decision making. New technologies and consequent methodologies should be more explored and exploited to collect hard-to-find data and complement the available information.

Invaluable information on migrants are captured at national level, however, important data gets lost in the EU cooperation between Member States and even at national level: the report appears to highlight the importance of increasing opportunities for **knowledge and best practice sharing** between Member States, e.g. in topics such as the issuance of Blue Cards or integrating migrants. Also at national level, there can be a lack of coordination, as sometimes happens in the treatment of unaccompanied minors between the many authorities in care of the minor.

Approaches and solutions

- *Use a holistic approach to capturing data, via the integration of various disciplines / methodologies;*
- *Improve and blend the use of new methodologies, such as remote sensing and social media analysis;*
- *Enlarge the use of qualitative research (e.g. for CEAS), longitudinal surveys (e.g. for integration), multi-dimensional projections (e.g. for demography), sample surveys (e.g. for migration and development), econometric models (e.g. for integration); situational approach and network analyses (e.g. regarding smuggling);*
- *Increase information sharing between Member State authorities and at local level;*
- *Encourage the exchange of best practice in all migration areas.*

4. Challenge: Need of a longer term vision when it comes to dealing with migration

As necessary as it is to have up-to-date data to understand the current situation, it is just as important to look at the longer-term perspective. It has been noted that a number of areas need **long-term, integrated responses**: with the Common European Asylum System; with the impact of non-migration policies on migration and development; or with the policy decisions around health and welfare still very much grounded in the demographic challenges of today, rather than those of the future.

There is a risk that measures taken in exceptional, emergency situation become the norm. This then results in responses, especially at the local level, that could be chaotic and precarious if they became of long-term.

Insufficient evaluation and assessment of the long-term impact of initiatives and projects do not provide the opportunity to learn from past experience or align best practices among Member States. In addition, a constant monitoring of the implementation of EU/national

legislation at national and regional level could promote higher standards of reception and more effective and timely responses to the fast-evolving situations.

Approaches and solutions

- *Take full consideration of other policies that are not necessarily migration-relevant yet have an indirect impact on migration;*
- *Use foresight in order to improve policy or anticipate trends (e.g. in asylum and demography) in the future;*
- *Ensure independent evaluation of current and past initiatives (e.g. in anti-trafficking, return) to learn from past positive and negative experiences and provide more robust instruments.*

Concluding remarks

The influx of migrants entering the EU today has - amongst some political, public and media spheres – **caused a sort of "immigration hysteria"**¹. Of course, the consequences and impacts that the reception of hundreds of thousands of refugees will have on Member State economies and societies are still largely unknown. However, existing data and lessons learnt from history can undoubtedly help steer policy makers. On many occasions, evidence highlighted in this report has allayed some of the fears perpetuated by media. Thus, it is not enough to produce knowledge, this **needs to be explained clearly and expressed correctly so that misinformation is reduced to the minimum.**

Migration is not a new phenomenon. The EU can succeed in reducing irregular migration, but it cannot avoid giving protection to those who are in real need of it, or opportunities to those who are already in the EU and contributing to its growth. Perhaps opportunities that policy makers have today at hand are linked to the exploitation of new emerging technologies and methodologies.

¹ As defined in the "The World Today" interview by Tariq Ali with Professor Bridget Anderson of the University of Oxford, in June 2015.

Methodology

This report is the result of the research carried out under Task 5 of DG JRC's Task Force on Migration and Demography.² Task 5 aimed to “*identify approaches and solutions to overcome gaps and challenges including poor data, inadequate models, insufficient information sharing, inaccessible, non-comparable and fragmented knowledge affecting the community working on migration and demography in the EU; this includes a scanning of activities and output of competent bodies outside the JRC*”.

The report is structured following the four pillars outlined in the European Agenda on Migration³ (the Agenda). A few additional chapters are included to cover some aspects not explicitly touched on in the Agenda, but still considered to have a relevant role in migration and an impact on demographic trends.

Contributors to Task 5 were divided into small groups, or in some cases, there were individual contributors. Each group (or individual) was assigned a sub-section or a chapter ideally based on their expertise. Contributions to each sub-section had to answer the following questions:

1. What are main points/findings/debates concerning the priority area/sub-category allocated to you?
2. How does the information gathered in question 1 relate to the scope and the structure of the European Agenda on Migration?
3. What current information and data is available, who is producing it and how?
4. What and where are the main gaps and challenges?
5. What are the solutions or approaches to address these gaps and challenges based upon your research?

Contributors conducted a review on the recent developments at policy and research level, through the mapping of what has been done by other Commission DGs (taking into consideration TF Task #1 deliverable), by DG JRC (taking into consideration TF Task #2 and 3 deliverables) and by relevant international, European and national entities dealing with migration (taking into consideration the list of entities provided by TF Task #6).

To complement this review, two Annexes were created: the first being an overview of the main gaps and challenges as well as the suggested solutions for the whole report (Annex 1), and the second being a preliminary inventory of available migration data and data sources (Annex 2). The inventory contains the relevant migration data and sources that have been identified in the course of carrying out this task. If deemed relevant, the same database has been reported under multiple sections of the inventory. The information retrieved consists of databases at the international and EU level, with the acknowledgement that a lot of data are also produced at the national level. Some projects, studies or indices have been also reported. The data in Annex 2 are not meant to be definitive, neither is it an endorsement of reliability or quality, rather it describes what data are being collected and how and can be considered as a preliminary inventory. Comments on the reliability or constraints of the data are captured in the report.

The report and the Annexes are not meant to be exhaustive and neither can they be considered as fully complete. This is largely due to the sheer breadth and depth of the topics of migration and demography, and due to the fact that these are areas which can evolve quite fast and data

² The Task Force was set up to assist the Commission in managing the migration crisis. One of the tasks of the TF is to identify the gaps and challenges concerning migration and demography in order for DG JRC to better assist the Commission.

³ A European Agenda on Migration. Com(2015) 240 Final.

can appear out of date relatively quickly. Also the changing face of today's political climate can affect migration policy immensely. Precisely, since the completion of the main body of the report (**end of March 2016**), a number of policy initiatives have been published, such as the Communication on Smart Borders⁴; the Communication on reforming the Common European Asylum System⁵; proposal for the Eurodac Regulation⁶; the EU-Turkey Agreement⁷; as well as progress report made in the fight against trafficking.⁸

There were two rounds of review of contributions. The final report has remained faithful to the original chapters although some subsections have been merged and new ones have been added. A third review (mid-March) and a final endorsement (May 2016) by all the members of the Task Force has then given.

Finally, it must be noted that the opinions stated in this report are not officially attributed to that of the Commission. The purpose of this report is to inform, encourage and stimulate the debate as well as map the current status of data availability.

⁴ Com (2016) 205 final

⁵ Com (2016) 197 final

⁶ Com (2016) 272 final

⁷ http://europa.eu/rapid/press-release_MEMO-16-963_en.htm

⁸ Com (2016) 267 final

I. Irregular migration

a. Additional: Access to and quality of data

Policy and debate

The reasons why a person undertakes a (sometimes life-threatening) migration are many, complex and interlinked, ranging from seeking a better life, fleeing persecution or war, or to escape poverty. In some instances, such a migration does not comply with legal requirements for entry, or criminal gangs are involved, smuggling migrants into the EU for a price. A migrant can become irregular also once he or she overstays their visa permitting them to stay in the EU.

There has always been irregular migration⁹ across land / sea borders into the EU. More recently, the unprecedented number of people entering the EU has re-focused EU policymakers' attention on the need for an appropriate response, including, in the short-term, measures to reduce the loss-of-life, which has been reported to be around 7,500 between 2014 and the beginning of 2016.¹⁰ The migration flow is considered to be mixed, namely '*complex population movements including refugees, asylum seekers, economic migrants, and other types of migrants as opposed to migratory population movements that consist entirely of one category of migrants*'.¹¹ Confounding an irregular migrant with a recognised asylum seeker for whom an asylum decision has not yet been made is also commonly done, notably by the media.

By definition, there are no reliable statistics on visa over-stayers nor indeed on the total number of irregular migrants currently residing in the EU. For the latter, an earlier estimate from 2008 was that 1.9 to 3.8 million irregular migrants resided in the EU-27 (Citizens and Governance in a Knowledge-Based Society; European Commission 2009a). During 2014, data from Frontex Risk Analysis Unit (Frontex 2015) indicated that there were 441 780 detections of illegal stay in the EU. The vast majority (86%) of them were detected inland and therefore presumably to be long-term visa over-stayers.

The treatment of irregular migrants within EU Member States (MS) is one area that attracts much debate, ranging from the terminology used to describe them, especially in the media;¹² their contribution, involvement and exploitation in the informal economy¹³; their fundamental rights, including access to healthcare (see, for example, European Union Agency for Fundamental Rights 2015); the different legal regimes across the EU or their criminalisation (see, for example, Provera 2015); their detention, including prior to return to their country of

⁹ Irregular migration" is defined as "Movement of persons to a new place of residence or transit that takes place outside the regulatory norms of the sending, transit and receiving countries." Likewise, an "Irregular Migrant" is defined as "a third-country national present on the territory of a Schengen State who does not fulfil, or no longer fulfils, the conditions of entry as set out in the Schengen Borders Code, or other conditions for entry, stay or residence in that Member State." Source: EMN Glossary, http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european_migration_network/glossary/index_m_en.htm

¹⁰ Till February 2015. IOM, Missing Project, <http://missingmigrants.iom.int/>

¹¹ EMN Glossary, http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european_migration_network/glossary/index_m_en.htm

¹² See, for example, work of PICUM, <http://picum.org/en/news/picum-news/45839/>.

¹³ See literature review in Haidinger (2007).

origin (Hatzis 2013; ICMPD 2013);¹⁴ the different practices for regularisation (ICMPD 2009);¹⁵ and the measures adopted to reduce irregular migration¹⁶.

The need for effective policies to reduce irregular migration has existed since the Tampere Council conclusions in 1999.¹⁷ It received further prominence as part of the European Pact on Immigration and Asylum in 2008¹⁸ and formed a major part of the EU Action on Migratory Pressures in 2012.¹⁹ More recently, in 2015 irregular migration has become one pillar of the European Agenda on Migration (the Agenda). Specific priorities on irregular migration are:

- Addressing the root causes of irregular and forced displacement in third countries (see Chapter I.b);
- The fight against smugglers and traffickers (see Chapter I.c);
- Return (see Chapter I.d);
- Implementing the "Smart Borders" initiative which will *inter alia* strengthen the fight against irregular migration by creating a record of all cross-border movements by third-country nationals (see also Chapter II);
- Modernisation of visa policy via a revision of the Visa Code and the establishment of a Touring Visa (see Chapter IV.c).

The political declaration and Action Plan arising from the Valletta summit on migration²⁰ agreed on priority domains, including: a) maximising the benefits of migration and addressing root causes of irregular migration and forced displacement, comprising *inter alia* of mainstreaming migration in development cooperation or addressing instability and crises; b) prevention of and the fight against irregular migration, migrant smuggling and trafficking in human beings, comprising *inter alia* of improving intelligence gathering and sharing.²¹

There are many aspects called for in the Agenda that are not or cannot currently be routinely or accurately provided for. For example there is a policy need to have information on irregular secondary flows of asylum seekers,²² especially within the Schengen area.²³ Furthermore, some well-defined links are not recognised enough. For example, concerning the link between migration and development, the Agenda mentions the need to ‘develop benefits of migration’, when instead it ought to mention the need to ‘maximise the benefits of migration’. Finally, the Agenda does not appear to cover the Employer Sanctions Directive,²⁴ which aims to penalise those who employ irregular migrants.

¹⁴ See also <http://www.detention-in-europe.org/>.

¹⁵ See also section 7 of EMN (2012).

¹⁶ An overview of irregular migration and MS plus Norway's measures to reduce it can be found in a report by the European Migration Network (2012).

¹⁷ http://www.europarl.europa.eu/summits/tam_en.htm (October 1999)

¹⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3Ajl0038> (September 2008)

¹⁹ <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%208714%202012%20REV%201> (April 2012)

²⁰ <http://www.consilium.europa.eu/en/press/press-releases/2015/11/12-valletta-final-docs/> (November 2015)

²¹ Following the Valletta Summit, in January 2016, the Commission adopted ten new measures to improve stability and tackle the root causes of irregular migration and displaced persons in Africa to be implemented by the end of 2016 http://europa.eu/rapid/press-release_MEMO-16-69_en.htm

²² The phenomenon of migrants, including refugees and asylum seekers, who for different reasons move from the country in which they first arrived to seek protection or permanent resettlement elsewhere. In the case of irregular secondary movements this is done without informing the relevant authority(ies). Source: EMN Glossary

²³ http://www.consilium.europa.eu/en/meetings/european-council/2015/12/201512-EUCO-conclusions_pdf/ (European Council of 17/18 December 2015)

²⁴ Directive 2009/52/EC

Data availability and research gaps

By definition it is difficult to quantify in a consistent, comparable manner data on irregular migration simply because it is not officially recorded in a coherent way like, for example, legal migration. However, there continues to be a need to monitor irregular migration, notably for the fast-evolving developments.

A number of approaches are currently used and identified below to at least obtain an estimate of the numbers of these migrants. Often such data have very partial coverage coming from, for example, surveys, apprehensions, regularisation programmes. More specific data on main (informal) working sectors, living conditions, access to basic social services such as education or health, public perception tend to be on a more ad-hoc basis and are certainly not available for the whole EU-28.

This lack of data has been addressed using different estimation methods. The most common method is based on deducting from the foreign-born population the flow of regular migrant (residual). Other approaches use Delphi surveys, two-step capture/recapture method from the field of animal ecology, the reduction in population in countries of origin, the number of persons captured at border controls and the requests for regularisation.

As highlighted in Annex 2, main sources of data on irregular migration come from Eurostat, Frontex, IOM/UNHCR and ICMPD. Eurostat ensures a high quality of comparable data, in accordance with the Migration Statistic Regulation (European Union 2007). However one criticism often made is that they are sometimes not up-to-date enough to inform topical policy discussions. Frontex, on the contrary, is able to provide information more rapidly, but the downside is that it has not been subject to the statistical rigour that Eurostat applies.²⁵ The same is valid for data provided by IOM and UNHCR. The ICMPD annual yearbook obtains data from these reliable sources and the thorough analysis done by the ICMPD gives confidence in the quality of their reporting, which covers the whole year.

The Clandestino project has been the reference database for irregular migration studies, but because the project is now finished, updated numbers for the EU-28 are no longer produced but updated estimates for some MS are done.²⁶ The estimates provided by the Clandestino project were well-received, although there were some criticisms of their methodology, e.g. extrapolating estimates from the few countries that were analysed in the project to the whole of the EU-27.

In addition, OECD provides some data along with regular migration. A disadvantage, from an EU-28 perspective, is that it does not cover all EU MS and the data published are from two or more years before (e.g. the 2015 report presents 2013 data). However, it is a recognised authoritative publication providing also a global (OECD Member States) analysis.²⁷ Finally,

²⁵ For example, Frontex clarified in 2015 that irregular border crossings may be attempted by the same person several times in different locations at the external border. This meant, for example, that a person who was counted by Greece could again be counted when they entered the EU for the second time through Hungary or Croatia. See <http://frontex.europa.eu/news/710-000-migrants-entered-eu-in-first-nine-months-of-2015-NUiBkk>.

²⁶ For example in Germany it is estimated that there were at least 180 000 and at most 520 000 irregular migrants in 2014, see Vogel (2015)

²⁷ See for example the International Migration Outlook publication.

sometimes other entities collect data for a specific study/need, for example, the EMN's ad-hoc query activity used to record information on irregular migration.²⁸

The quality, timeliness and comparability of data, notably for EU-28, are a challenge. A general issue²⁹ is that data are often not based on common definitions making cross-country comparability difficult. Another issue is that verified and quality checked data are often for at least one calendar year before the year in which they are published (e.g. 2014 data are published in late 2015).

The following parameters are considered to be the main gaps in providing comprehensive data for the flow and stock of irregular migration to inform policy. In an ideal situation, data on these parameters would also be disaggregated by nationality, gender and age.

Irregular Migration Flow

- **Migration routes to EU's external borders:** A report by the UK's Overseas Development Institute (Cummings et al. 2015) identified a need for more evidence on migration routes,³⁰ especially across North Africa and from Eritrea and Somalia, with little appearing to be known about the factors influencing how long someone spends in different countries during their journey to Europe. The role of networks in informing initial decisions to migrate; their role during the journey and in transit locations; the way that technology, communication tools and online media are shaping these networks and affecting decisions; and how individual characteristics, especially gender, relate to these networks are also relevant to understand the push factors.
- **Identification:** The Luxembourg Presidency report³¹ pointed out the need of further actions in a) strengthening identification, registration and fingerprinting of all third-country nationals entering the Schengen area irregularly; and b) increasing checks regarding irregular migration inside the Schengen area.
- **Mixed Migration Flows:** Migrants arriving at the EU's external borders may enter for a number of different reasons (e.g. to seek asylum, for economic reasons, to reunite with family members). Such migrants may not enter via a designated border crossing point and thus would enter irregularly, including being smuggled, or trafficked or alternatively enter via a designated border crossing point and immediately claim asylum. Separating out the (type of) irregular migrant flow from this mixed migration flow is clearly difficult.
- **Migration routes within EU:** As identified by the Luxembourg Presidency and the call from the December 2015 European Council, ways to measure movements of irregular migrants within the EU is called for, but the available data is, at best, limited. More evidence on why they move on to another MS would also provide a more complete overview (Cummings et al. 2015).

²⁸ http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european_migration_network/reports/docs/ad-hoc-queries/298.emn_ad-hoc_query_irregular_migration_updated_wider_dissemination_en.pdf.

²⁹ Except for the data provided by Eurostat.

³⁰ Which would complement the maps that DG JRC regularly produces for the EEAS and those done by IOM.

³¹ Managing migration flows: State of play - implementing solutions and remaining gaps <http://www.consilium.europa.eu/en/press/press-releases/2015/12/17-presidency-report-managing-migration-flows/>

Irregular Migration Stock

- **Number of irregular migrants:** often available data (Eurostat, Frontex, etc.) are provided only for those found to be irregularly-staying in a EU MS, i.e. only after apprehension by the authorities.
- **Visa over-stayers:** At least anecdotally, visa over-stayers are considered to be a significant means by which a third-country national becomes irregularly-resident in a MS, especially within Schengen. Whilst at one point proposed, there is no systematic recording of when a third-country national who has entered with a Schengen visa then leaves the EU, especially if they leave from another MS within the Schengen area.³² The Visa Information System can, however, indicate when a third-country national's Schengen visa has expired.
- **Number of irregular migrants working illegally:** Available data does not cover all MSs and does not seem to be provided or updated on an annual basis. For example, there is a report on the implementation of the Employer Sanctions Directive³³ which provides some data, but only from 2012, on the number of irregular migrants identified by MS authority's raids on companies. From a fundamental rights perspective, there is a PICUM report from 2005, which offers recommendations on ways to protect what they refer to as "undocumented migrant workers" (LeVoy and Verbruggen 2005) plus a report from the Fundamental Rights Agency on irregular migrants employed in domestic work (European Union Agency for Fundamental Rights 2011).

Approaches and solutions to overcome the gaps and challenges

Addressing irregular migration should be seen as part of a comprehensive approach to migration. President Juncker, in his Political Guidelines, called for a robust fight against irregular migration, traffickers and smugglers, and for securing Europe's external borders, which must be paired with *inter alia* a new European policy on legal migration³⁴.

As noted by the Clandestino project, irregular migration is the result of a complex interplay of factors, including the lack of legal migration channels as well as the failure in making existing ones work (Citizens and Governance in a Knowledge-Based Society; European Commission 2009b). The same concept was echoed by the UN Special Rapporteur on the human rights of migrants in 2013, saying that recognising the labour needs of destination States would reduce irregular migration, as well as the power of smugglers.³⁵

³² A Commission proposal for a Regulation on an Entry- Exit system which could have provided such data was withdrawn and is currently being re-formulated as part of the new EU Smart Borders System proposal. http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_home_001_revision_smart_borders_en.pdf. Proposal expected in 2016.

³³ *Communication from the Commission to the European Parliament and the Council on the application of Directive 2009/52/EC of 18 June 2009 providing for Minimum Standards on Sanctions and Measures against Employers of Illegally Staying Third Country Nationals*, COM(2014) 286 final; <http://ec.europa.eu/transparency/regdoc/rep/1/2014/EN/1-2014-286-EN-F1-1.Pdf>. See, in particular, Table 3 of inspections carried out by MS's authorities.

³⁴ (European Commission 2015c); this new legal migration policy would also aim to address, for example, the EU's increasing skills needs.

³⁵ "Mainstreaming a human rights-based approach to migration within the High Level Dialogue" Statement by the UN Special Rapporteur on the human rights of migrants, François Crépeau. PGA Plenary Session – Criminalization of Migrants New York, 2 October 2013.

In terms of the approaches used in the EU, the EMN Report on *Practical Measures to reduce Irregular Migration* (EMN 2012)³⁶ albeit from 2012, provides a good summary of the issues and how they are/could be tackled. The study found that reducing irregular migration is a policy priority of the EU and its MS, as well as for Norway; that there is a need for joint EU action and MS cooperation, as a common EU approach is a major influence driving the implementation of MS measures, but that national policies tend to respond to their specific national needs.

Enhancing cooperation with Eurostat, Frontex, IOM and ICMPD would serve to develop a (collaborative) approach to improve our knowledge on irregular migration. A workshop with relevant stakeholders could be organised as a first step on this direction.

The MPI Report (Rosenblum and Hipsman 2016) whilst focussing on the US situation, may provide some useful insights into approaches to be developed. It presents the various metrics to measure the phenomenon³⁷, which could be used as a starting point to develop a more complete, coherent picture of irregular migration in the EU. For example, Frontex already provide data on the first two metrics and possibilities in respect of the last two metrics have been addressed. Other metrics could also be developed based on and bringing together what data already exists.

In a similar vein, and also from the US experience, consideration could be given to producing an EU version of the Pew Research Center's recently published assessments of irregular migration,³⁸ including a public survey on what Americans want to do about irregular migration and an estimate of the irregular migrant population.

Elsewhere, there is work from Australia which looks at *Expanding the evidence base on irregular migration through research partnerships* (McAuliffe and Parrinde 2015). It identified specific research gaps in the Australian context and developed a “toolkit” to identify key themes and research questions to guide a policy-relevant research programme.

³⁶ This study could thus be a good starting point from which to formulate a research programme along with the findings from an *EMN Ad-Hoc Query on national definitions of irregular migrants and available data* available at http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european_migration_network/reports/docs/ad-hoc-queries/298.emn_ad-hoc_query_irregular_migration_updated_wider_dissemination_en.pdf

³⁷ Adapted to EU terminology: 1) How Many Irregular Migrants Enter Between Border Crossing Points? 2) How Many Irregular Migrants Enter Through Border Crossing Points? 3) How Many People Overstay Schengen Visas? 4) How Many Unauthorised Immigrants Live in the EU?

³⁸ <http://www.pewresearch.org/fact-tank/2015/11/19/5-facts-about-illegal-immigration-in-the-u-s/>

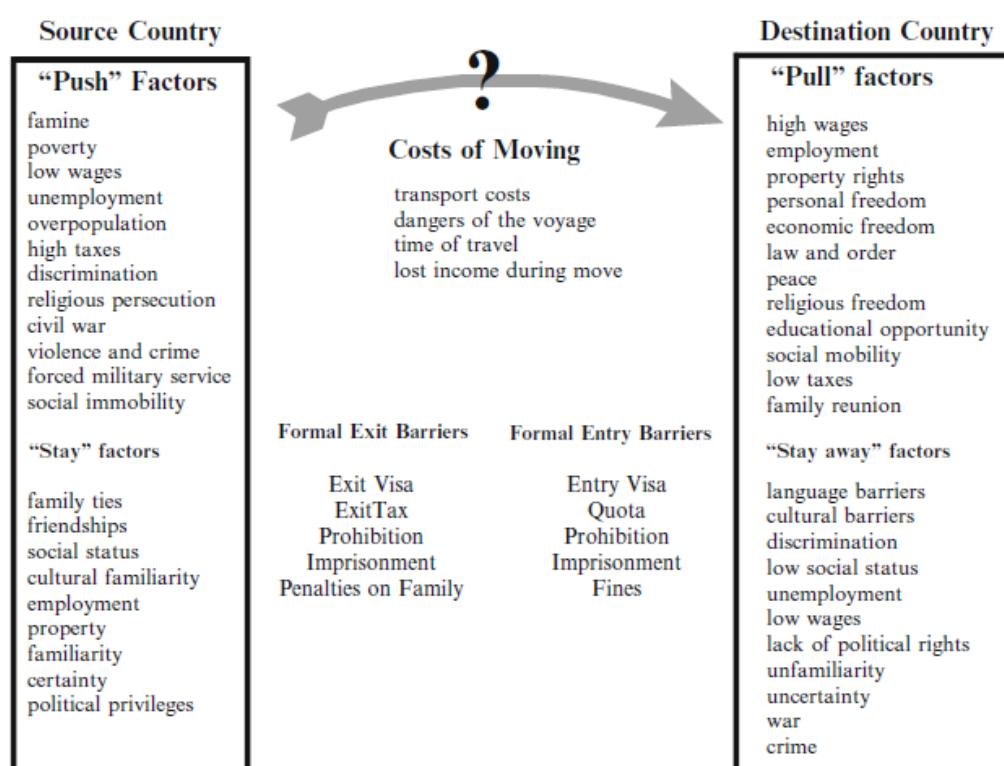
I. Irregular migration

b. Root causes of irregular migration

Understanding the determinants of migration is essential for the analysis of current and past trends and a pre-requisite for forecasting. Forecasting and modelling deserve particular attention since they may represent the final and most direct input in policy support from the research on migration determinants.

The determinants of migration are generally classified into push, pull and cost factors. Figure 1 from Bodvarsson and Van den Berg (2013) gives a good summary of the many factors which are considered in the scientific literature and policy debates on migration.

Figure 1: Push, pull and cost factors



As can be with regular migration, irregular migration is driven by a combination of push and pull factors. The following sections give more details on environment, conflicts and economic factors driving irregular migration.

i. Environment

Policy and debate

Global environmental change is considered as a driving force of migration through its influence on a range of economic, social and political sectors which eventually affect migration (Foresight 2011). Various studies predict large environmental migration flows due to the impacts of climate change and others environmental stressors (Foresight 2011; Laczko and Aghazarm 2009; N. Myers 1997; N. Myers 2002; C. A. Myers, Slack, and Singelmann 2008; IMO 2014).

Changes in the frequency and intensity of severe weather events, such as floods, storms or heat waves, geographic and seasonal shifts of rainfall and dry periods, already have major socio-economic impacts today and are predicted to become more pronounced as global temperatures are rising. Some slow onset disasters such as sea-level rise are expected to continue for many centuries to come³⁹ and represent major threats for coastal areas and soils. Particularly affected are islands in the southern Pacific, Gulf of Bengal and possibly Alaska, making them in fact uninhabitable⁴⁰ and thus leading to long-term and irreversible displacements. Furthermore, frequent exposure to extreme or long-term weather driven hazards can lead to environmental degradation with direct influence on water resource management, food security and agricultural production and health.

According to Adger *et al.* (2014) the major movement of people within a country is from rural to urban settlements, a trend that is expected to continue in the future (Randers 2012). Severe weather events may lead to temporary (internal or international) displacements; examples are the hurricane Katrina in 2005 and the devastating Pakistan floods in 2011. Abrupt and extreme climatic changes or repeated exposure to disasters could force people to migrate permanently from some areas (e.g. low-lying coastal zones such as in Papua New Guinea, Tuvalu) (Table 2).

However such cases do not allow for a general conclusion on a direct and unidirectional relationship between environmental change and migration, since other factors such as coping capacity, adaptation strategies and political context add complexity (Figure 2). Furthermore, the impacts of climate change and environmental degradation may exacerbate also latent conflicts.

³⁹ IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

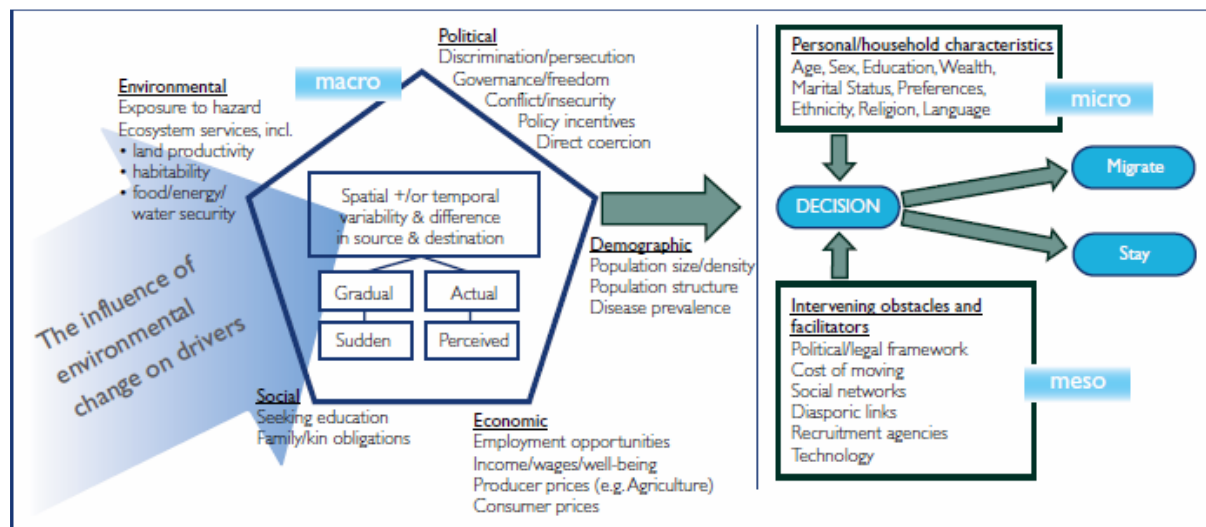
⁴⁰ <http://www.bpb.de/gesellschaft/migration/kurzdossiers/57257/klimawandel-und-migration?blickinsbuch>

Table 2: Empirical evidence on observed or projected mobility outcomes (migration, immobility, or displacement) associated with weather-related extremes or impacts of longer-term climate change

Type of impact or extreme	Change in migration trend or flow	Region	Impact on migration, by type of short-term event and long-term change	Source
Drought and land degradation	Evidence for increased mobility or increased displacement	Ethiopia	Outmigration of household heads due to drought-related famine. Different coping strategies lead to variations in the timing of migration.	Meze-Hausken (2000)
		Mexico	At the state level, a reduction in crop yields is associated with an increase in international migration to the United States.	Feng et al. (2010)
		Western Sahara	Environmental factors influenced decisions to migrate internationally from refugee camps.	Gila et al. (2011)
		Kenya	Households farming high-quality soil are less likely to migrate, especially for temporary labor; soil degradation therefore causes increased outmigration.	Gray (2011)
		India	Temporary migration is identified as “the most important” coping strategy in times of drought in rural villages.	Jülich (2011)
		Canada	Higher population loss was associated with settlements containing areas of poorer quality agricultural soils during droughts of 1930s.	McLeman and Ploeger (2012)
		Guatemala	Migrants to the expanding agricultural frontier commonly attributed their outmigration to soil degradation.	López-Carr (2012)
		Sahel	In three case regions, the pressure to migrate had significantly increased since the 1970s, with response to persistent droughts identified as a factor.	Scheffran et al. (2012b,d)
		Burkina Faso	Drier region populations were more likely to engage in rural–rural migration, both temporary and permanent, than people from regions with more rainfall. Rainfall deficits have different impacts depending on the duration and distance of the migration.	Henry et al. (2004)
	Burkina Faso*	Simulated scenarios of dry climate increase migration fluxes compared to wet scenarios. Highest international migrant flows are shown with the dry climate scenarios.	Kniveton et al. (2011)	
	Evidence for decreased mobility	Mali	Reduced international migration occurred during the 1980s drought concurrently with an increase in localized cyclical migration.	Findley (1994)
		Nepal	Deforestation, population pressure, and agricultural decline leads to local mobility, especially among women, but no increases in internal or international migration.	Massey et al. (2010); Bohra-Mishra and Massey (2011)
		Uganda	High soil quality marginally increases migration, especially permanent non-labor migration; therefore soil degradation reduces outmigration.	Gray (2011)
	Evidence for socially differentiated mobility outcomes	United States	Dustbowl migrants from Oklahoma to California in the 1930s had different social and economic capital endowments from those who stayed within state.	McLeman and Smit (2006)
		Ecuador	Influence of natural capital on migration differed between men and women. Access to land facilitates migration in men; women are less likely to migrate from environmentally degraded areas.	Gray (2010)
		Ethiopia	Male migration increases with drought. However, marriage-related moves by women decrease with drought.	Gray and Mueller (2012)
		Burkina Faso	Labor migration became a key off-farm livelihood strategy after droughts in the 1970s for groups dependent on rain-fed agriculture.	Nielsen and Reenberg (2010)
		Mongolia	Diversity was seen in herders’ mobility strategies in response to climate change. For a minority, responses entailed greater overall annual mobility. Other herding households experienced significant reductions in mobility.	Upton (2012)
	Flooding	Evidence for increased mobility or increased displacement	United States	Ten counties and parishes in Louisiana, of the 77 impacted counties, experienced 82% of the total population increase in the year following Hurricane Katrina.
Vietnam			Cumulative impacts of seasonal flooding increase outmigration rates in the Mekong Delta.	Dun (2011)
Bangladesh			22% of households affected by tidal-surge floods, and 16% affected by riverbank erosion, moved to urban areas.	Foresight (2011)
Evidence for decreased mobility or trapped populations		Bangladesh	No outmigration was detected after 2004 tornado in Bangladesh as a result of the effective distribution of disaster aid.	Paul (2005)
		Senegal	More than 40% of new migrant populations located in high risk flood zones in Dakar.	Foresight (2011)
Evidence for socially differentiated mobility outcomes		United States	Emergency evacuation responses and return migration after Hurricane Katrina were highly differentiated by income, race, class, and ethnicity.	Elliott and Pais (2006); Falk et al. (2006); Landry et al (2007)
		Bangladesh	Wide variation seen among groups in attitudes toward, and capabilities for, migration as an adaptation to the impact of cyclone Aila.	Kartiki (2011)
Sea level rise	Evidence for increased mobility or increased displacement	United States	Relative sea level rise caused island depopulation in Maryland. Final abandonment was a result of the population falling below the threshold required to support local services.	Arenstam Gibbons and Nicholls (2006)
			Coastal villages in Alaska are affected by sea level rise and coastal erosion to the point where resettlement is the only viable adaptation.	Bronen (2010); Oliver-Smith (2011); Marino (2012)
		United States ^a	The impact of future sea level rise is projected to extend beyond the inundated counties through migration networks that link inland and coastal areas and their populations.	Curtis and Schneider (2011)
		Vanuatu	Contemporary example of whole village displacement was associated with inundation, both from sea level rise and tectonic movement on Torres Islands.	Ballu et al. (2011)
	Papua New Guinea	Communities on Bougainville are considering resettlement to the main island due to coastal erosion, land loss, saltwater inundation, and food insecurity.	Oliver-Smith (2011)	
	Evidence for decreased mobility or lower migration	Tuvalu	On the island of Funafuti, surveyed residents emphasize place attachment as reasons for not migrating, and do not cite climate change as a reason to migrate.	Mortreux and Barnett (2009)

Source: Adger et al. (2014, 769)

Figure 2: Environmental drivers of migration and their indirect impact on other drivers



Source: Foresight (2011, 12)

Moreover, the definition of an environmental migrant or “climate refugee” is still controversial and not universally accepted (Adger et al. 2014). In fact, there are a variety of terms used in literature including environmental or climate change migration; environmentally-induced migration; ecological or environmental refugees; disaster-induced displacement; and climate change refugees which are used in slightly different context and with different definitions.⁴¹

Climate change is experiencing increased attention not just as a driver of migration but also as an adaptation strategy, as recognised by the Cancun Accord of United Nation Framework Convention on Climate Change (2010).⁴² The recent Paris Agreement (2015) explicitly mentions in its preamble the need of ‘develop recommendations for integrated approaches to avert, minimise and address displacement related to the adverse impacts of climate change’.

In the EU, the Global Approach to Migration and Mobility (GAMM) recognised in 2011 that ‘addressing environmentally induced migration, also by means of adaptation to the adverse effects of climate change, should be considered part of the Global Approach’⁴³. A few years later, the Commission presented an Adaptation Strategy and working paper on climate change, environmental degradation and migration (European Commission 2013a). The European Agenda on Migration cites climate change as a source to feed directly and immediately into migration and the subsequent need to mitigate this “threat”. However, according to the World

⁴¹ <http://migrationeducation.de/56.1.html?&rid=208&cHash=6cf222c08c5309a7e2288d393f5ba88d>

⁴² **2009** UNFCCC COP15: Copenhagen Accord United Nations Human Rights Council Resolution: human rights and climate change. **2010** UNFCCC COP16 Cancun Paragraph 14F on migration. **2011** UNFCCC COP17 Durban: Advances on Green Climate Fund and National Adaptation Plans (NAPs); Global Migration Group (GMG) Statement on Migration and Climate. **2012** UNFCCC COP18 Doha, Migration in Loss and Damage, paragraph 7 (a)(vi) Launch of the Nansen Initiative. **2013** EC Adaptation Strategy and working paper on climate change, environmental degradation and migration; UN High-level Dialogue on International Migration and Development Resolution 46th; UN Commission on Population and Development (OP28) mentions “climate and migration” UNFCCC COP19 Warsaw. **2014** IPCC Report UN SG Climate Summit Small Islands Developing States conference UNFCCC COP20 Lima (IOM, 2015). **2015** Paris Agreement; moreover some Intended Nationally Determined Contributions (INDCs) indicate migration as adaptation strategy.

⁴³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: The Global Approach To Migration And Mobility /* COM/2011/0743 Final */, p.7

Economic Forum the idea that climate-induced migration could produce large inflows of people are extremely unlikely to happen (Cattaneo and Peri 2015).

A concrete difficulty for the EU in understanding the strategic, political, and humanitarian aspects associated with climate change and its links to migration has been attributed to the shared competences among various EU institutional actors, namely DG HOME, DG DEVCO, DG ECHO and the EEAS (Petrillo 2015).

Data availability and research gaps

Migration is driven by a plethora of different factors and it is therefore difficult to establish straightforward, causal relationships between environmental degradation and migration (Warner 2011). As a consequence, it is a challenge to isolate environmental causes on migration from other factors. Consequently, there exists a wide range in expert estimates of climate change and environmental induced migrant populations.

Current studies use diverse range of approaches (quantitative methods, modelling, and qualitative research). Earth-System models aim to establish future climates and their environmental impacts, but they are only approximations and often not capable of describing current climates. Analysis from long-term records of remote sensing data can provide evidence for verification and validation, but they describe the past; extrapolation to the future based on past data may not fully take changing environmental regimes into account. Moreover, climate projections would always include a wide range of uncertainty and can therefore describe only possible scenarios. Multi-model and ensemble approaches are essential to describe the probabilities of certain outcomes, acknowledging that there is a best scenario.

When trying to understand the impact of environmental changes on migration, not only the physical processes but also socio-economic processes need to be understood and underpinned with data. Calibration and validation at regional scale of the meta-model combining bio-physical indicators of water security with socio-economic-political data are the main research challenges.

Moreover, researchers are often forced to work with very limited amount of data, in particular when dealing with developing countries, which are usually also the most vulnerable ones. According to Brown (2008a), real baseline data for ongoing migration movements are not available and developing countries often do not have the capacity to collect these data. Difficulties in obtaining information on internal migration (see following Chapter I.b.ii) are considered for establishing the relationships between migration and climate change. Similarly, the estimates of potential migrants in the near and distant future vary considerably (Brown 2008b).

Therefore, datasets (see Annex 2) that apparently have a global coverage, may have been extrapolated from sparse underlying data, making reliable conclusions difficult. Often studies are based on the number of people exposed to increasing environmental risks and not on the number of the people expected to migrate.

To summarise, the main challenges for the study of the environment – migration nexus (Koubi et al. 2013; Warner 2011; Randers 2012; European Commission 2013a) are:

- **Definition and estimates:** Different definitions, crucial in guiding policy-making;

- **Drivers:** Lack of data and theoretical model to know which individuals decide to migrate and why environmental change causes migration in some regions or countries, but not in others;
- **Scenario and impacts:** Creation of reliable global scenarios of climate change and economic development, studies on their impacts on society and well-being as well as design of effective adaptation scenarios.

Approaches and solutions to overcome the gaps and challenges

IOM⁴⁴ highlights that the complex interactions and feedback mechanisms between climate change, environmental degradation and migrations must be “*addressed in a holistic manner, taking also into account other possible mediating factors including, inter alia, human security, human and economic development, livelihood strategies and conflict*”.

Reliable and sufficient data for the different sectors, robust methodologies and models will contribute to inform policy makers about evidence-based scientific possibilities. Communication on the reliability of the data and the subsequent uncertainties and consequences will require an attempt to develop objective and empirically-based detailed numerical scenarios for the physical and socio-economic processes. This will be particularly important for mainstreaming policies such as the EU strategy for adaptation to climate change (2013)⁴⁵, which specifically addresses the link between climate change, environmental degradation, and migration. The adaptation strategy⁴⁶ promotes migration as a possible and effective coping mechanism to climate change. Furthermore, specific actions foreseen by the strategy are improved preparedness and emergency response in particular with regard to high impact weather events.

DG JRC could continue to play a role to promote advancements in the study of root causes for migration, with a particular focus on environmental issues. In the current and planned activities, DG JRC is leading the development of an index for the Global Climate Change Alliance built for DEVCO to include development elements. DG JRC is also working towards multi-risk early warning systems for severe weather events to allow for better preparedness and better organisation of humanitarian aid for disasters and will be working on adaptation options to climate change in developing countries to increase resilience to weather extremes in those countries. While IOM, in collaboration with SciencePo, is currently designing an Atlas of Environmental Migration (as of March 2016), DG JRC is more specifically developing an Atlas of Water Cooperation and Conflicts that could be used as a layer to understand displacements.

Studies would focus on:

- The development of “best data sets” versus official data sets on population, migration and displacement, as well as various drivers. Best data sets can consist of a blending of official data with remote sensing and social media sampling;
- Research on the impact of climate change on environmental degradation and socio-economic impacts globally and across multiple sectors with specific focus on agriculture, water resources, coastal and urban areas;
- Comparative research across countries, which could allow the identification of key common characteristics for different types of displacement strategies (internal, external, temporary, permanent). Most of the existing studies are country specific;

⁴⁴ <https://www.iom.int/migration-and-climate-change>

⁴⁵ http://ec.europa.eu/clima/policies/adaptation/what/documentation_en.htm

⁴⁶ With regard to the role of migration as adaptation strategy the EC DEVCO funded the project implemented by IOM “Migration, Environment and climate change: evidence for policy”.

- Micro-level analysis of the perception and attitude towards environmental change in order to identify the reason why some people might leave when facing environmental change and not others;
- Assessment of the linkages between adaptation and migration for building resilience, increasing adaptive capacity at country and individual level.

ii Conflicts

Policy and debate

Conflict-induced migration occurs whenever the country of origin has armed conflicts, civil war, generalised violence or whenever a person is persecuted on the grounds of nationality, race, religion, political opinion or social group. This movement of population might lead to different categories of migrants namely, internally displaced persons (IDPs), or persons under some other type of international protection.⁴⁷ However, these persons can also be added to the number of irregular or smuggled migrants, as well as fall into human trafficking networks.

According to the UNHCR (UNHCR 2015a), at the end of 2014, 59.5 million people (of which 38.2 million IDPs and 1.8 million asylum seekers) were forcibly displaced due to conflict, generalised violence, or human rights violations. The number of refugees worldwide grew by 45% between 2012 and 2015.⁴⁸ With a refugee population of 15.1 million, 2015 witnessed the highest level of refugees in the last 20 years: top origin countries being Syria, Afghanistan and Somalia, and top host countries being sub-Saharan Africa, Asia and the Pacific region, followed by Europe. According to UNHCR,⁴⁹ children account for almost half of forcibly displaced people worldwide.

Recently, South and Jolliffe (2015) found that migration decisions in conflict areas are based on five main factors: physical security; prospects for a stable livelihood; access to services and amenities; perceptions and levels of confidence in the peace process; and influences from various political actors and authorities. Davenport et al.'s (2003) transnational comparative study on forced migration has shown that threats to personal integrity are a key driver for people to abandon their homes.

Under the first pillar of the European Agenda on Migration (the Agenda) 'Reducing the incentives for irregular migration'⁵⁰ there is a mention of civil war and persecution that can cause migration. Placing forced migration under Pillar I (irregular migration) and not under Pillar III (asylum seekers) may foster the perception of an asylum seeker being an irregular migrant. It also exemplifies a long-standing difficulty of the conceptualisation of forced

⁴⁷ The 1951 UN Geneva Convention defines a refugee as a person who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it.." (art.1). An internally displaced person (IDP) is "someone who was forced to flee his/her home but who did not cross a state border" (European Commission 2015d).

⁴⁸ First six months. <http://www.unhcr.org/558193896.html>.

⁴⁹ <http://www.unhcr.org/pages/49c3646c1e8.html>.

⁵⁰ Sub paragraph 'addressing the root causes of irregular and forced displacement in third countries'.

migration (Zetter 1991; Turton 2003), which is the use of certain labels according to institutional responses.

The European Commission is involved in providing humanitarian aid to assist displaced people in the areas of crisis, especially with the actions carried out by the DG ECHO.⁵¹ The Agenda focuses on root causes, including conflicts, yet it does not necessarily address the factors influencing forced migrants' decisions to stay in the destination country, to return, or resettle in the country of origin.

Data availability and research gaps

The available information is produced by various stakeholders using different methods. Country-level data is published by UN agencies engaged in humanitarian relief such as the UNHCR, IOM, OCHA (UN Office for the Coordination of Humanitarian Affairs) or the World Food Program. Another source of information are governments and local authorities. With an increasing demand for information by key actors, the media, and the general public; data collection and availability has increased over the past few years (UNHCR 2015b). The main databases and data sources are provided in Annex 2.

Comprehensive data on IDPs is not only crucial for providing assistance and protection, it is also important to estimate the likelihood for them to move outside the country. The decision to leave the country of origin closely depends on whether there are any durable options to stay in the country of origin. Such information is of utmost value for potential host countries, including the EU. In 2010, the Inter-Agency Standing Committee has released a framework on durable solutions for IDPs which may be used for evaluation (Inter-Agency Standing Committee 2010).

The focus of forced migration studies has been on the root causes seeking to establish a correlation between the factors that shape the emergence and persistence of conflicts, their nature and level of violence, and migration patterns of aggregate groups (Williams and Pradhan 2009). Data used in these studies are usually survey data about individuals and households, data about violent events/conflicts or instability over time. Field research and k-informant interviews are also used. Some studies use a threat-based decision model, which is designed to explain how the macro-level context determines the micro-level behaviour. It is based on the general assumption that armed conflict (physical threats) places absolute constraints on individual choices (Williams and Pradhan 2009; Davenport, Moore, and Poe 2003; Moore and Shellman 2004). The importance to understand individual situations, which until now has been less explored, has been highlighted in a more recent report (South and Jolliffe 2015) on forced migrants' decision-making processes.

Studies on the post-migration phase for refugees focus on the availability of durable solutions and their role in the peace process, especially in their country of origin (Lindley 2008; South and Jolliffe 2015; Jolliffe 2015).

⁵¹ Humanitarian aid for refugees helps to meet the most pressing needs of refugees; protect and support refugees during their displacement and when returning to their place of origin; increase the self-reliance of refugees and reduce their 'dependency syndrome'. ECHO also assists refugees who are trapped in protracted situations (in exile for five years or more without prospects of immediate durable solutions), which affect more than 45% of the world's refugees. ECHO works also towards decreasing the number and scale of refugee crises through its work on disaster preparedness and prevention, which aims to reduce the vulnerability of disadvantaged communities and prevent their displacement.

There are several gaps and challenges faced by researchers which can be divided into the following sections:

- **Definitions:** categories or labels based on institutional responses to the movement of people partially caused by the lack of a commonly agreed, operational definition (Turton 2003; Lindley 2008; NRC and IDMC 2015); as well as established threshold of violence required to identify a conflict-induced migration;
- **Data availability and reliability:** the debate around IDPs is often considered politically sensitive for governments and data can be difficult to collect; the data collected by NGOs, in some cases, may be misrepresented to shape the media's portrayal of a crisis; it can be difficult to track demographic changes in the population such as births or deaths (NRC and IDMC 2015); there is a need for disaggregated data by location and demographics in order to identify protection gaps (UNHCR 2015b);
- **Comparability:** the data stems from multiple stakeholders, covering different time frames and spaces, and therefore are not comparable; the differences in working definitions further contribute to the lack of comparability;
- **Practical obstacles:** many IDPs live in informal settlements, with host families or scattered over urban areas which make it hard to identify them; there is limited access to affected areas due to security concerns, lack of transportation, logistical costs or government restrictions; in addition, data collection on displacement sometimes stops altogether once NGOs leave the areas (NRC and IDMC 2015). Finally, there is a lack of capacity among government and other stakeholders to collect data (Inter-Agency Standing Committee 2010).
- **Inadequate models:** the threat-based decision model refers only to physical threats as drivers for migration, thereby dismissing economic, social, or political consequences of conflict (Williams and Pradhan 2009); there is an absence of a widely used model to collect the number of IDPs / forced migrants or to track them beyond their initial movement; there is also the need to constantly update registration databases (NRC and IDMC 2015).

Approaches and solutions to overcome the gaps and challenges

With regard to the pre-migration phase, there is a need for deeper analysis of other factors than the threat of violence as drivers for migration, taking into account that decisions are impacted by the various available options (South and Jolliffe 2015). In addition, more research could be done to identify a level of violence that has to be reached to make people risk migration. The use of already developed indices on conflict and risk assessment could be explored and linked to population movements (i.e. JRC Global Conflict Risk index⁵², Global Disaster Alert and Coordination System⁵³ or Index for Risk Management⁵⁴). With the aim of analysing root causes using quantitative data, in 2017 DG JRC will develop the EU Migration Index, which will create a scoreboard to capture push and pull factors for migration.

Insecurity and lack of access to affected areas has been overcome by the use of high-resolution satellite imagery. Although some limitations related to budgetary and meteorological constraints exist, the usefulness of such methods could be further explored, and DG JRC has a long-standing expertise and recognised competence on this. UNHCR and the Operational

⁵² <http://conflictrisk.jrc.ec.europa.eu/>.

⁵³ <http://www.gdacs.org/alerts/default.aspx>.

⁵⁴ <http://www.inform-index.org/>.

Satellite Applications Programme (UNOSTAT) have recently signed a cooperation agreement to enhance geographic information capacity using GIS data for camp monitoring.⁵⁵

Greater cooperation and information-sharing between the different stakeholders is needed to bridge the gaps in the available data, ensure comparability, and enhance reliability. Two positive examples are: 1) the Working Group for Archiving and Documentation of History of Forced Migration of IASFM⁵⁶ as it seeks to document and preserve ‘refugee archives’, by calling for national and international coordination; and 2) crowd-sourced information used in the Democratic Republic of Congo, to monitor displaced populations by drawing on local people to report information about IDPs and their living conditions, using their mobile phones and the internet (NRC and IDMC 2015).

An interesting analysis has been developed by the World Economic Forum with the Global Risks Landscape (WEF 2016) that explores how emerging global risks and trends, including involuntary migration caused by violence and conflicts as well as by environmental or economic reasons, may impact societies.

iii. Economy

Policy and debate

The economic study of migration focuses on three main aspects: the determinants of migration; the consequences at the country of origin; and the consequences at country of destination. In the literature, there is no general distinction between root causes for regular and irregular migration. Evidence indicates that the same economic determinants apply both to regular and irregular migration and the same static labour market model can be used.

The prevailing micro-economic theory as to why people migrate is linked to the human capital model and attributes migration choices to a spatial disequilibrium in return of supply of labour and investment on the individual well-being. Migration is interpreted as a maximisation choice between costs and risks associated to the travel and resettlement, lost opportunities at origin, and life time expected income at destination. The identification of wage differentials as major determinants of migration dates back to Smith (1776) and Hicks (1973) and the supply of labour is the central element of most popular model of migration developed by Borjas (1999) and Sjaastad (1962).

The supply driven theory is complemented by models, which consider migrants as consumers satisfying a demand for amenities or social benefits. Demand side theories are mostly applied by economic geographers in the field of urban and regional studies in developed countries. Their interpretation has been enriched in geographical theories by the inclusion of distance as a proxy for migration costs with the formulation of the gravity model of migration (Zipf 1946; Ravenstein 1885).

Other theories underlie how migration is a result of household decisions, and in this context, remittances⁵⁷ become an important component of migration choice.

Considering also migration costs, it is acknowledged that an inverted U-shaped curve (a.k.a

⁵⁵<https://www.unitar.org/unhcr-and-unitar-sign-landmark-cooperation-agreement-unosat-satellite-analysis-support>.

⁵⁶ International Association for the Study of Forced Migration. <http://iasfm.org/adfm/>

⁵⁷ Remittances are discussed in further detail in Chapter IV.e.

migration hump)⁵⁸ links migration and income in a given country and whenever the per capita income is too low, migration is simply not affordable. Moreover, logistical and informational costs of moving, reinforced by underdeveloped economies, might create poverty gaps and lock potential migrants in their country of origin. Hence, the very poor do not migrate (King and Lulle 2016). Yet at the same time, there is evidence to show that migration – both internal and external – is an important route out of poverty.⁵⁹ This consideration is relevant for the debate on the value of development aid and in the fight against poverty at the origin to reduce migration flows (Guriev and Vakulenko 2015).

Labour productivity and wages differentials cannot explain the many forms of migration. Social scientists try to fill these gaps by considering a wider range of migration determinants, including happiness and subjective perception of the relative deprivation in respect of a reference group.

At EU level, DG DEVCO plays an important role in improving the understanding of the migration–development nexus.⁶⁰ Besides engaging in policy dialogues with developing countries at national and regional level on migration, DEVCO is also implementing a number of projects in this area, including the “Emergency Trust Fund for stability and addressing root causes of irregular migration and displaced persons in Africa”.⁶¹ The European Agenda on Migration, in the section related to root causes of irregular migration, mentions EU external cooperation assistance and in particular development cooperation to tackle global issues such as poverty, inequality and unemployment while focusing more on attracting talents. In the following Valletta summit and subsequent Action plan (11-12 November 2015), one of the five priority areas is related to addressing root causes of irregular migration.⁶²

However, whilst root causes for migration are basically the same for regular and irregular migrants, the link between irregularity and economic trends can display two facets: an irregular migrant can be an economic migrant who migrates to find better life opportunities, but that does not (or is not able anymore to) follow regular entry channels; or a migrant can become irregular for economic reasons if (s)he cannot fulfil anymore legal requirements to stay due to job loss, which can occur especially in a downgrade economic period.

Data availability and research gaps

The above commentary shows that there is not a unified theory of migration determinants among sociological, geographical and economic disciplines. Isolated attempts to cover the entire world (Hatton and Williamson 2002; Mayda 2009) and to develop a unified theory - e.g. the world systems theory of Wallerstein’s (1974), the migration systems theory (Kritz, Lim, and Zlotnik 1992), a unifying perspective (Massey et al. 1993), the mobility transition theory (Zelinsky 1971) - are not considered sufficiently developed and universal to be operational

⁵⁸ Please see Chapter IV.e for more detail.

⁵⁹ King and Lulle (2016) to the six-year empirical research done with partners in Albania, Bangladesh, Egypt and Ghana (Black 2009).

⁶⁰ More discussion of this nexus is in Chapter IV.e.

⁶¹ The Fund is made up of €1.8 billion from the EU budget and European Development Fund, combined with contributions from EU MSs and other donors. The Trust Fund will benefit a wide range of countries across Africa encompassing the major African migration routes to Europe.

⁶² One of the suggested action is investing in development and poverty eradication with, for example, a joint EU-Africa analysis of the root causes of irregular migration and forced displacement to improve the evidence-base of public policies, the enhancement of employment opportunities and revenue-generating activities in regions of origin and transit of migrants or the development of networks between European and African vocational training institutions, with a view to ensuring that vocational training matches labour market needs.

(Bijak 2011).

The labour market model and the classical partial equilibrium models are not sufficiently capturing the complexity of social behaviour and individual migration choices. In addition, the focus of the economic literature on considering migrants as workers does not allow to fully capture the determinants of irregular migration. Most theories ignore forced migration, system shocks and do not explicitly model policy factors. In addition, existing theories and the available data are not capturing a progressive transition of migration towards mobility: that migration processes take place within regions, national boundaries are becoming more permeable and people are changing residence many times during their lifetime. The gap from a theoretical perspective is accompanied by the limitations for empirical research due the lack of data, especially if referred to irregular migrants.

Regression models are used in empirical research to estimate the relevance (elasticity) of different determinants on the migration flows based on past data. These models are mostly extensions of the basic gravity equation (augmented gravity model). The gravity model presents from an econometric perspective several challenges - i.e. endogeneity, omitted variable bias and treatment of zero flows (Baldwin and Taglioni 2006), incorporation of a multi-lateral resistance term (Anderson and van Wincoop 2003), solution with Ordinary Least Squares estimates vs. non-linear solvers (Baier and Bergstrand 2009) - which are still subject to methodological developments. A particular aspect in the development of these regression models is the choice of the explanatory variables to be tested and proxies and dummies to represent income differences and inequalities, migration costs and regulatory and policy restrictions as depicted in Figure 1.

Approaches and solutions to overcome the gaps and challenges

The lack of a unifying theory for migration requires economist to take a more holistic approach in examining migration determinants. A review of forecasting methods (Disney et al. 2015) indicates that forecasting of migration has the highest level of uncertainty in respect of the other components of demographic change (fertility, mortality). The report identifies the highest level of uncertainty in the data and the highest level of impact on policy decisions in particular for the forecasting of migration of refugees and asylum seekers. Given the high levels of uncertainty, it becomes important for migration forecasts to state uncertainties explicitly and to address current limitations in the data.

In conclusion, economic factors do not necessarily play the most predominant role in reasons as to why people choose to migrate and that even if a migrant chooses to move for economic factors, it is not necessarily because they are poverty-stricken. The approach to tackling the root causes to migration therefore requires a holistic one, including looking at the emerging field of experimental economics and well-being.

I. Irregular migration

c. Fight against smuggling and human trafficking

Policy and debate

Academic debate

The debate on smuggling and trafficking in human beings (THB)⁶³ is very much related to their definitions and consequent conceptualisation amongst the two terms (Rubio Grundell 2015; ILO 2015; PICUM 2007). While trafficking and smuggling networks might operate in a similar way and many trafficking situations can start as smuggling, THB is to be considered a severe violation of fundamental rights as it implies the use of force and coercion. Instead, the definition of smuggling⁶⁴ is based on three main elements: the transnational aspect, the illegal entry and the financial or other material benefit for the smuggler.

Notwithstanding these differences, research shows how this distinction is often blurred in practice. Europol (Europol Joint Supervisory Body 2015) described THB as an octopus, where the body represents the elements of the crime (coercion, threats, deceit and exploitation) and while the tentacles represent the various forms of exploitation (prostitution, labour exploitation, etc). The risk is focussing only on the tentacles, misclassifying the event. The debates on the definition are relevant for policy given the practical and legal consequences between the different forms of irregular migration.

IOM estimates that smugglers charge a migrant from EUR 500 to EUR 10,000 to be brought into Europe.⁶⁵ In 2015, Europol has identified more than 40,000 individuals suspected of being involved in migrant smuggling and estimated that migrant smuggling has produced a turnover of EU 3-6 billion (Europol 2016). Research⁶⁶ on the organisation of smuggling networks for Europe often describes an entrepreneurial organisation model with an increase use of social media and the provision of a plethora of services, such as forgery of documents and parallel banking systems. Using a sociological perspective, the relationship between migrants and smugglers is complex being based on mutual interest and sometimes including also family members in the system (Van Liempt and Doornik 2006; United Nations Office on Drugs and Crime 2011). Some of the suspects involved in migrant smuggling are also involved in other types of crime, for 20% in THB (Europol 2016).

For human trafficking, according to ILO, forced labour generates \$150 billion in illegal profits per year and involves almost 21 million victims (2012)⁶⁷. Latest available figures worldwide refers to 2012 and shows that only 18% of detected victims are men, while 49% are women

⁶³ The EU Directive 2011/36 defines human trafficking as “the recruitment, transportation, transfer, harbouring or receipt of persons, including exchange or transfer of control over that person, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation.” This definition is very similar to the one proposed in the Palermo Protocol, GA 55/25 of November 2000.

⁶⁴ Article 3 and 6 of the Protocol Against The Smuggling Of Migrants By Land, Sea And Air, Supplementing The United Nations Convention Against Transnational Organized Crime, UN, 2000.

⁶⁵ See <http://www.politico.eu/article/eu-police-agency-launches-migrant-smuggling-center-europol/>

⁶⁶ An extensive review of research papers on smuggling of migrants was carried out by the United Nations Office on Drugs and Crime (UNODC) (United Nations Office on Drugs and Crime 2011). Another study prepared for DG HOME by Optimity Advisors (Optimty Advisors 2015) provides more recent evidence on the smuggling of migrants based on case studies in several MSs and third countries.

⁶⁷ <http://www.ilo.org/global/topics/forced-labour/lang--en/index.htm>

and 33% are children. Wide regional differences have been recorded with regard to the forms of exploitation: Europe and Central Asia present the highest percentage of sexual exploitation (66%) coupled with 26% of forced labour / slavery like conditions. Most victims of trafficking are foreigners, however the majority of offenders are citizens of the country of conviction⁶⁸ (United Nations Office on Drugs and Crime 2014). Eurostat adds that in the 28 MS over the years 2000-2012, 65% of registered victims were EU citizens (Eurostat 2015).

Policy debate

At international level, there are 4 main strategies dealing specifically with the smuggling of migrants: the UNODC Strategy 2012⁶⁹, the UNODC Strategy for North Africa 2015, the EU Action Plan⁷⁰ and UNHCR and IOM Joint UN Counter-Trafficking Strategy (2015-2017)⁷¹. The EU action plan⁷² was adopted in May 2015 as part of the European Agenda on Migration (the Agenda) proposing the following priorities:

- to enhance police and judicial response;
- to improve gathering/sharing information;
- to enhance prevention and assistance to vulnerable migrants;
- to foster cooperation with third countries.

The latest developments on the EU approach to THB are depicted in the Directive 2011/36/EU on preventing and combating trafficking in human beings⁷³, based on the “3P” +1 dimensions of prevention, protection, prosecution and partnerships. The following EU Strategy towards the eradication of trafficking in human beings 2012-2016 set five priorities⁷⁴ the EU should focus on.⁷⁵

The Agenda does not seem to reflect the recent developments proposed by ILO⁷⁶ related to the concept of ‘modern slavery’, which includes those suffering slavery-like conditions or who have been trafficked. In fact, in the Agenda, THB is not linked to labour migration, rather it is included in the category of irregular migration. The main objective of THB policies is ‘*to crack down on smugglers and traffickers’* networks⁷⁷. Although there are numerous similarities with smuggling, addressing them together highlights the enforcement-centred approach focused on

⁶⁸ It has to be noticed the diverging situation of Central Europe and the Balkans, where 92% of offenders are nationals, and Western and Southern Europe, where the percentage decreases to 40% (United Nations Office on Drugs and Crime 2014).

⁶⁹ Comprehensive Strategy to Combat Trafficking in Persons and Smuggling of Migrants, 29 February 2012.

⁷⁰ Contribution to the International Efforts to address the smuggling of migrants across the Mediterranean - Strategy for the building of Capacity of North African Countries through an Integrated Response, UNODC, January 2015.

⁷¹ Strategy to Address Kidnapping, Human Trafficking and Smuggling in Persons – Strengthening Alternatives to Onward Movement

⁷² EU Action Plan against migrant smuggling (2015 - 2020), COM(2015) 285 final, European Commission, Brussels, 27 May 2015

⁷³ That replaces the 2002 framework decision.

⁷⁴ Including ‘*increased knowledge of and effective response to emerging concerns related to all forms of trafficking in human beings.*’ The others being: 1. Identifying, protecting and assisting victims of trafficking; 2. Stepping up the prevention of trafficking in human beings; 3. Increased prosecution of traffickers; 4. Enhanced coordination and cooperation among key actors and policy coherence.

⁷⁵ An online portal has been launched by the EU to provide information, material and news on the fight against THB http://ec.europa.eu/anti-trafficking/citizens-corner-eu-actions-explained/eu-actions-explained_en

⁷⁶ ILO Protocol of 2014 o the Forced Labour Convention (1930).

⁷⁷ A European Agenda on Migration.(COM (2015) 240 Final), p.7

curbing irregular entries (Dimitriadi 2015). This might risk to focus more on MS – rather than the person – as the real victim of this criminal activity.

The Agenda also mentions the interest of the Commission to ‘*step up action against illegal employment of third country nationals, inter alia through better enforcement and application of the Employers Sanctions Directive which prohibits the employment of third-country nationals who have no right to stay in the EU*’⁷⁸. Irregular status rather than slavery-type working conditions or exploitation is considered to be once more the main angle.

Data availability and research gaps

The EU action plan gives explicit emphasis on data collection for smuggling activities, while the strategies from UNODC and IOM indicate priorities on research and analysis. Also the ILO Protocol to the Forced Labour Convention and its Recommendation no 203 (2014) calls on MSs to collect reliable statistics, including on trafficking for the purpose of forced labour.

Several initiatives regarding data collection on THB⁷⁹ have been promoted under the previous EU Action Plan (2006-2010)⁸⁰. In 2009, a Delphi survey has been used to reach consensus on basic indicators of human trafficking under a joint EC/ILO project (ILO and European Commission 2009). The results consisted of six operational indicators for labour and sexual exploitation.⁸¹ In the same year, a Guidelines for the Collection of Data on Trafficking in human beings was developed by IOM (2009), recommending that data should be collected on victims, traffickers, trafficking process and the criminal justice responses, suggesting a template for each of these subjects. In 2010, the International Centre for Migration Policy Development (ICMPD 2010) published a comprehensive study which gives an overview of publicly accessible data on human trafficking.

Precise data on smuggling and THB, however, are rare owing to the very nature of the topic itself involving hidden populations and criminal networks. In terms of methodology, most of the analyses have to rely extensively on qualitative information, interviews, ad hoc surveys and case studies. Quantitative research is strongly affected by the lack of reliable data. Empirical data includes law enforcement records and criminal justice statistics, both dependent on the number of detected cases (and this can be impinged by a number of factors, such as the reluctance of victims to report crimes or the capacity of the system in detecting cases of trafficking) and only able to capture a subset of the whole population. Estimates derive from a larger pool of sources, including non-governmental reports or qualitative analyses, such as interviews with k-informants, victim of trafficking (VoT) or analysis of court verdicts. Surveys

⁷⁸ Ibidem, p. 9

⁷⁹ Other projects and activities related to human trafficking worth to mention are hotline services for victim of human trafficking, which can create extensive dataset (e.g. <https://traffickingresourcecenter.org>, <https://polarisproject.org/resources/building-global-safety-net-victims-human-trafficking-toolkit-hotlines>); a guidelines to prevent abusive recruitment, exploitative employment and trafficking of migrant workers produced for the Baltic Sea Region (<http://www.heuni.fi/en/index/researchareas/humantrafficking/adstringo-addressingtraffickinginhumanbeingsforlabourexploitationthroughimprovedpartnershipsenhanceddiagnosticsandintensifiedorganisationalapproaches.html>) with the sustain of the EC; a number of prevention initiatives such as awareness-raising campaigns and capacity building activities (<https://www.iom.int/counter-trafficking>) and finally various manuals and handbooks on THB for criminal justice practitioners or police forces, such as Anti-Slavery (2005), United Nations Office on Drugs and Crime (2009), Council of the European Union (2015). For an overview please refer to European Commission (2013b).

⁸⁰ COM(2006)437.

⁸¹ Namely deceptive recruitment, coercive recruitment, recruitment by abuse of vulnerability; exploitation; coercion at destination; and abuse of vulnerability at destination.

represent a method for estimating the numbers of people living in modern slavery,⁸² often combined with extrapolation methods for those countries not covered by surveys. Non-governmental organisations also collect data and are relevant sources, although some of the limitations are linked to the lack of standard data collection and/or reporting mechanisms.

To date, victim-centred data constitutes the primary source for THB. The strength of this primary data lies in the relatively easy way to get in contact with the VoT (identified by the law enforcement or NGOs) and the possibility to retrace the trafficking process. Nonetheless, there exist some ethical, methodological and practical limitations in using this victim-derived data, such as the selection effect, the emotional impact on the victim, under reporting, the limited knowledge on the global process. A more general obstacle in this kind of data source is the criteria used for the identification of victim of trafficking, which differ in terms of scope and implementation, making even more challenging comparative analysis.⁸³

Research on criminal organisations are more limited for budgetary reasons, narrow geographical coverage and security risks. Criminal justice data, including police investigation and court transcripts, as well as ethnographic studies, can reveal information on these activities.

The main actors⁸⁴ involved in collecting (different) data on smuggling and THB are mainly IOM, UNODC, ILO, Frontex, and as of 2013, Eurostat. A number of indices have also been developed to evaluate and measure the impact of policies and initiatives against THB, mainly using text analysis and following the 3Ps paradigm of prosecution, protection and prevention.⁸⁵ More information about the databases is available in Annex 2.

International and regional entities (UNODC, Europol, Eurostat) are unanimous in highlighting the difficulties to estimate ‘dark figures’. Generally, the dispersion of data among various entities and the lack of a standardised data collection weakens the reliability of different measurement and analysis, hampering the comparability across countries.

In addition, their interpretation is complex: for example an increase of detected human trafficking cases might reflect: a) a higher effort by the system to fight against human trafficking; b) an increase of trafficking activities; c) a change in the legislation; d) a new/more functional identification process; e) a successful campaign to denounce trafficking; and f) a change in information gathering. With a specific focus on the EU, Eurostat (2013) noted that the quality of the statistics collected did not comply in all respects with the requirements of the European Statistics Code of Practice. Thus data validation checks have been introduced to improve the situation, although differences *“still exist in the process of recording data, as well as differences between national legal definitions, make it difficult to compare and assess trends across EU Member States”* (2014,15).

⁸² To increase the likelihood of identifying victims in a random sample survey, the Walk Free Foundation survey questions are based on a network sampling frame which used “family” rather than “household” as the reference group.

⁸³ See EMN (2014).

⁸⁴ In addition, at European level, the Fundamental Right Agency (FRA 2010) has addressed the issue of child trafficking in the EU, while Frontex developed a training package on detection and identification of VoT for border guards (Frontex 2012) and EASO created a training module on interviewing vulnerable persons and children (2013) and is mapping MS current practices as regards identifying vulnerable asylum applicants. Europol has been tasked to assist in facilitating information exchange. Eurojust supports the cooperation between national authorities in the investigation and prosecution of THB. The European Police College (CEPOL) organises training for policy officers (Justice and Home Affairs Agencies 2014).

⁸⁵ A comparison of the indices is available in Seo-Young Cho (2014).

Some of the gaps and challenges of empirical research on smuggling and trafficking⁸⁶ can be included in the following categories:

- **Topic:** confusion between smuggling and THB; overemphasis on trafficking in women and sexual exploitation;
- **Data:** dark figures, many cases remain unreported or undiscovered; detailed data are not available or partial and incomplete at global and regional level; hard-to-compare-data; lack of time series; difficulty to publically access data;
- **Clarity / Identification:** little uniformity in the application of the Palermo Protocol by the governments and by the researchers; different methods to identify and therefore counts VoT⁸⁷; differences in criminal justice systems and in the classification of offences; unwillingness of many victims to be identified; disincentives to act against traffickers (i.e. insufficient training for victims' identification, inadequate legislation to prosecute traffickers);
- **Methodology:** rarely properly explained; absence of standardised guidelines for data collection; short timeframe and geographic coverage; small samples not necessary representative of the entire population; fragmented data risks of double counting victims; need for multi-method and interdisciplinary approaches; absence of centralised reporting and data-gathering at national level; no systematic exchange of information across entities and countries; indices that lack long-term indicators (3P) or lack of systematic evaluation standards and limited geographic coverage (Greta Scorecards);
- **Evaluation:** few evaluations and monitoring of counter trafficking initiatives⁸⁸, including of prevention measures; difficulties in draft assessment of the long-term impact; duplication in funding similar activities.

Approaches and solutions to overcome the gaps and challenges

In response to these challenges, experts in the field have proposed some suggestions,⁸⁹ summarised following the above categories:

- **Topic:** focussed research on: a) smuggling and trafficking corridors, (including routes from Central, East and southern Africa) how networks work at regional level; b) demand side of this criminal activity;⁹⁰ c) traffickers behaviours and their role in the process; d) investigation on money flow related to THB (with financial investigations and cooperation with money transfer companies); e) other forms of exploitation, such as child begging; promote initiatives for fair recruitment practices⁹¹;

⁸⁶ (IOM 2005; IOM and Nexus Institute 2010; IOM and Nexus Institute 2014; Farrell and McDevit 2008; UN.GIFT 2008; ICMPD 2010; United Nations Office on Drugs and Crime 2014; CBSS TF-THB 2011; Laczko 2002; EMN 2014b; Eurostat 2015; OSCE 2011; European Commission 2015e).

⁸⁷ Some of the criteria adopted are persons who have been pre-selected as potential victims of trafficking, those officially recognised as VoT by the law enforcement officers, or by the NGOs, self-identified VoT, only those officially recognised as victims who are willing to testify against traffickers... Detailed criteria for the identification of VoT are not indicated in the existing asylum acquis; MSs are only obliged to establish appropriate mechanisms. Methods of screening also differ with regard to timing, authorities in charge of the screening... (EMN 2014b).

⁸⁸ (IOM and US PRM 2008).

⁸⁹ (ICMPD 2010; Farrell and McDevit 2008; FRA 2014; IOM 2005; Altai Consulting and IOM MENA Regional Office 2015; CBSS TF-THB 2011; PICUM 2007; IOM 2015b; ILO 2015).

⁹⁰ Ongoing project: <http://www.demandat.eu/>

⁹¹ For example the ILO Fair Recruitment Initiative (<http://www.ilo.org/global/topics/fair-recruitment/lang-en/index.htm>); or the IOM Initiative on Ethical Recruitment (<http://iris.iom.int/>).

- **Data:** promote data accessibility, respecting privacy; create central coordination in data collection;
- **Clarity / Identification:** robust and regular capacity building activities⁹² on data collection (especially in the countries of origin of THB)⁹³ and on victim's identification (especially in the countries of exploitation); increase the incentive to report for VoT and the disincentives for such criminal activities; better coordination at all levels⁹⁴ (i.e. define a mechanism to data exchange between countries / organisations);
- **Methodology:** in order to better understand the contextual setting, organisational network analysis, life histories, the use of interviews with smugglers could be promoted; a situational approach could be applied in order to study the demand-side of the trafficking (national demands, specificities of various markets...); initiate a series of small field studies at local level for specific geographical realities; longitudinal research investigating the circumstances of individuals before, during, and after trafficking; comprehensive approaches, and involving both countries of origin and countries of destination; snowball sampling could be used to estimate dark figures;
- **Evaluation:** ensure independent evaluation of current and past anti-trafficking initiatives; increase labour inspections to detect cases of trafficking at workplace; assess the capability of the VoT to integrate or reintegrate into the society to understand the long-term impact of trafficking.

A recent study by the European Parliament Directorate-General for External Policies (European Parliament 2015) has stressed that in the absence of safe and legal channels to seek asylum in the EU, people crossing the Mediterranean and along their route in Europe (particularly on the Western Balkans route) are liable to trafficking, smuggling and violence. The report considered that protection and securitisation of the borders is becoming the primary aim of governments rather than the development of effective strategies to protect the human rights of migrants and to save lives. IOM, among others, is also suggesting that one tool to address migrant smuggling in a comprehensive way is the creation of more legal channels for migration, and were more critical on the intent to systematically identify, capture and destroy vessels used by smugglers.⁹⁵

Latest developments have seen ILO as a promoter of a multi-stakeholders process to harmonize THB data collection worldwide. Recommendations on the measurement of forced labour will be drafted by 2018 and by 2020 at least 20 statistical surveys will be completed. In addition, by 2016 ILO wants to set up a Global Slavery Observatory as an instrument to manage and share knowledge on forced labour and as a dynamic tool for policy developments (ILO 2015). The ILO and the European Commission intend to promote joint activities within the context of 2030 Agenda for Sustainable development, and explore further cooperation in the fields of labour migration / fair recruitment / forced labour and THB as a renewed strategic approach and partnership⁹⁶.

⁹² The Valletta Action Plan takes into consideration the training needs for law enforcement, judiciary and border management authorities on investigation methods and judicial treatment of victims. Identification methods should as well be reinforced for all border officers.

⁹³ FRA (2014) called the MSs to ensure proactive dissemination and systematic use of tools developed a European and international level to assist border guards in identifying victims.

⁹⁴ The Dutch experience has been considered has a successful one (Eurojust - THB 2015). In January 2016 a Global Action initiative has been launched : https://ec.europa.eu/anti-trafficking/sites/antitrafficking/files/invitation_lunchtime_conference_21.01.2016.pdf

⁹⁵ <http://www.iom.int/news/iom-welcomes-european-commission-proposals-migration>.

⁹⁶ 12th High-level meeting between the ILO and the EC, Brussels 30/09/2015 – 01/10/2015 (ILO and European Commission 2015).

Taking into consideration DG JRC's knowledge and operational capacity, some concrete actions and research projects that could be promoted at the EU level are the following:

- Considered the increasing number of information sources and the consequent impact in data quality and comparability, produce a review of available data and update it regularly, with the inclusion of critical analysis of methodologies used and categories of data collected, in a way to support sound comparability and cross/national analysis, in collaboration with ILO (ICMPD 2010);
- Given recent developments in the modus operandi of criminal networks with the use of cyberspace⁹⁷ for recruiting migrants and victims of trafficking (Hughes 2014; Aziz, Monzini, and Pastore 2015), a new approach that is able to analyse social media content is needed to support prevention and prosecution of human trafficking. DG JRC has developed extensions to the European Media Monitor software to automatically detect pages on social media used by smugglers to attract migrants and refugees. DG JRC will support Frontex and Europol in deploying and further developing technical solutions to detecting internet pages used by smugglers;
- To best use all available information, a composite index could be created for European countries by integrating statistical (Eurostat) and qualitative – textual information (3P or Greta scorecards), in collaboration with Goettingen University (see (Seo-Young Cho 2014));
- A number of information sharing platforms⁹⁸ have been set up during the past months, namely the IOM/IMO/UNODC platform⁹⁹ on migrant smuggling by sea and the Europol European Migrant Smuggling Centre.¹⁰⁰ DG JRC could contribute to the development of tools and methods in the areas of data mining, anomalies detection and risk analyses, and identification of falsified or forged documents. DG JRC will build on domain expert knowledge from relevant authorities (MSs' authorities, Frontex, Europol,) to code modus operandi and analyse behaviors of interest for migrant carrying vessels;
- New technologies could be used to tackle smuggling and criminal networks. UNHCR is already exploring the possibility of using satellite imagery to identify smugglers' boats,¹⁰¹ a competence well developed by DG JRC. In addition, DG JRC has developed a platform for remotely detecting and tracking vessels at sea (Blue Hub) and carries out R&D activities on innovative platforms and sensors for small boats detection.

⁹⁷ Recent project: https://ec.europa.eu/anti-trafficking/eu-projects-and-funding/improving-and-sharing-knowledge-internet-role-human-trafficking-process_en

⁹⁸ These in addition to the main information systems maintained at international level as Interpol - TOP Programme giving access to Interpol's global police communications network (I-24/7); Interpol Stolen and Lost Travel Documents Database (SLTD Database); Interpol - Stolen and Suspect Vessels database; IOM - border management information system MIDAS (previously PRIS); Europol - Secure Information Exchange Network Application (SIENA); Europol - Information System (EIS); Frontex European Border Surveillance System (Eurosir).

⁹⁹ <https://www.iom.int/news/new-platform-set-improve-information-sharing-migrant-smuggling-sea>

¹⁰⁰ https://www.europol.europa.eu/content/EMSC_launch

¹⁰¹ <http://www.daily-sun.com/printversion/details/70866/UNHCR-plans-to-use-satellite-imagery-to-identify-smugglers-boats>.

I. Irregular migration

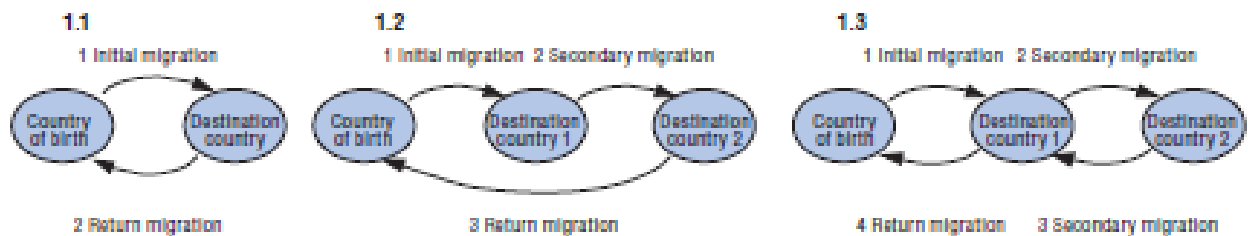
d. Return

Policy and debate

According to the United Nations Statistics Division for collecting data on international migration (Recommendations on Statistics of International Migration 1998) the definition of return migrants are "*persons returning to their country of citizenship after having been international migrants (whether short-term or long-term) in another country and who are intending to stay in their own country for at least a year*". Thus, it encompasses country of origin; place of residence abroad; length of stay in the host country; and length of stay in the home country after return (Dumont and Spielvogel 2008, 164). The EU's Return Directive (European Union 2008) does not define a returnee *per se*, but rather applies standards and procedures in relation to return decisions to "*third country nationals staying illegally¹⁰² on the territory of a Member State.*"¹⁰³ Therefore, there are two main categories of returnees – forced (including expulsion, obligation to leave the country, removal, etc.) and voluntary (that follows a personal decision of the migrant).

Migration has become far more complex. As noted by King and Lulle (2016, 28), new migratory geographical flows came into existence after 1989, which described the flexible, transient and unpredictable nature of migration from one country to another, and to another, using terms such as 'incomplete migration'; 'pendular migration'; and 'liquid migration'. Moreover, there have been changes to the time people spend as migrants, with circular migration¹⁰⁴ becoming more popular, in addition to other short-term types of migration. Therefore, there are various cases of return migration, as shown in the figure below.¹⁰⁵

Fig. 3: Various cases of return migration



Source: (Dumont and Spielvogel 2008, 165)

Just as return is no longer seen as a single migratory act, there has been a building body of knowledge on the theories surrounding return¹⁰⁶: including neo-classical economics; new economics of labour migration; structuralism; transnationalism; and cross-border social and

¹⁰² The definition of 'illegal stay' is the presence on MS territory that does not or no longer fills conditions of entry into that State. The 'Return Handbook', which was adopted with the EU Action plan on Return in September 2015, provides further clarification to these definitions, http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/european-agenda-migration/proposal-implementation-package/docs/return_handbook_en.pdf

¹⁰³ Article 2 (1) of the Return Directive

¹⁰⁴ A repetition of migration by the same person between two or more countries (EMN Glossary).

¹⁰⁵ This chart is to show that return can be part of a more complex migration history: the last country of residence before return is not necessarily the country the migrant had first emigrated to.

¹⁰⁶ Cassarino, Jean-Pierre, 'Debates on return migration', Return Migration and Development Platform, European University Institute, <http://rsc.eui.eu/RDP/research/schools-of-thought/>

economics networks, which aim to better understand the magnitude and dynamics of return migration to the countries of origin.

The European Agenda on Migration (the Agenda) tackles the questions from an EU political level and mostly concerning irregular migration, whereas the academic debates and the wider statistical analysis looks into return for regular and irregular migrants. Also in academic literature (King & Lulle, 2016) return is seen from a wider context, which impacts upon circular and temporary migration, and should be considered more thoroughly in the policy process.

The Agenda identifies the low enforcement rate of return, but does not touch on the data inconsistencies (see next section for further detail). This lies at MS level, and because there are differences in definition, in methods of collecting, etc. it is difficult to compare the data.

Another issue which is touched upon in the Agenda is the reintegration of returnees, which has been stressed as well by civil society. The question of reintegration also leads into negative or positive connotations connected to return that can have significant impacts on the morale of the returnee and their community at large. If the returnee is seen as a failure, then this will make the incentive to return much lower. If return is seen more than a single migratory act and part of the migration process, with skills, resources and values being acquired along the process, then it becomes a far more beneficial experience to the returnee.

A number of EU policy documents¹⁰⁷ have identified key challenges related to the study of the topic:

- The Agenda and the EU policy documents on return note that the EU return's system works imperfectly and that there is a comparatively low rate of enforcement of return decisions. The Commission's Communication on EU Return Policy¹⁰⁸ notes that "*there is a considerable gap between the persons issued with a return decision [...] and those who, as a consequence, have left the EU*".
- That voluntary return (whether assisted or not) is the most preferential policy on how to return migrants.
- Harmonising the implementation of the Return Directive or at least reducing divergence of implementation to a minimum.
- Commitment from third countries to cooperation agreements regarding readmission.
- A more integrated system of return management: joined up cooperation between the EU's return operations programmes such as EURINT (the European Integrated

¹⁰⁷ European Agenda on Migration, COM (2015) 240 final, http://ec.europa.eu/lietuva/documents/power_pointai/communication_on_the_european_agenda_on_migration_en.pdf; Communication on EU Return Policy, COM (2014) 100 final, http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com%282014%290199_/com_com%282014%290199_en.pdf; EU Action Plan on return, COM (2015) 453 final, http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/european-agenda-migration/proposal-implementation-package/docs/communication_from_the_ec_to_ep_and_council_-_eu_action_plan_on_return_en.pdf; Council Conclusions on EU Return Policy, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/143105.pdf; Council conclusions on the future of the return policy, <http://www.consilium.europa.eu/en/press/press-releases/2015/10/08-jha-return-policy/>; Valetta Summit Action Plan, <http://www.consilium.europa.eu/en/meetings/international-summit/2015/11/11-12/>; Communication on the State of Play of Implementation of the Priority Actions under the European Agenda on Migration, http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/european-agenda-migration/proposal-implementation-package/docs/managing_the_refugee_crisis_state_of_play_20160210_en.pdf

¹⁰⁸ COM (2014) 199 final, p. 3

Approach on Third Countries), ERIN (European Re-integration Instrument Network), and EURLO (the European Return Liaison Officers network).

- Enlarging the mandate of FRONTEX so that it can initiate return operations.

Data availability and research gaps

A number of organisations - including IOM, Frontex and Eurostat - collect data on return migrants, described in Annex 2.

Improving statistical information related to return is promoted in the Communication on Return Policy, which notes that emphasis will be given to improving statistics on return whether from or among MSs.¹⁰⁹ Furthermore, the EU Action Plan on Return notes that "*Reliable, comparable and consistent statistical data is crucial for enabling the development of adequate policy responses. While Member States provide statistical data on returns to Eurostat, inconsistencies have been identified.*"¹¹⁰ It has been remarked that there has been a discrepancy between the data MS provide to Eurostat and that to the EMN regarding return.¹¹¹

Limited available data is a view highlighted by both the OECD and the IOM (2008). There is little in the way of internationally comparable statistical information available on return migration due to two factors: that countries differ in legislation regarding nationality, and that they collect data differently. In case of the latter, some countries mainly collect data directly through population registries, whilst others collect data at border points (Joliver, Xenogiani, and Dumont 2012; Dumont and Spielvogel 2008).

Moreover, different definitions regarding return can create problems for data collection on return migrants. One of the most notable debates about return is that less attention is paid to return than to the decision-making process around emigration (King and Lulle 2016). According to King and Lulle (2016), this could be because the decision for a migrant to return is far more complex than the decision to emigrate.

Although the Migration Statistics Regulation¹¹² has gone a long way in harmonising and providing quality assurance in how they collect data, Eurostat does recognise certain problems. Since its data comes from the administrative records of the national authorities - mainly the Ministries of Interior or Immigration Agencies - completeness of data is still lacking. In addition, because not all MS have managed to harmonise their methodologies, disparities do exist, although over time they should reduce.¹¹³ Also Frontex expresses caution in interpreting the data, noting that, "*Despite all efforts of the Frontex Risk Analysis Unit and Member State experts involved in data exchange and analyses, it is conceivable that minor errors will occur in these reports due to very challenging timelines and the growing volume and complexity of the data and other information exchanged within the FRAN community.*"

¹⁰⁹ COM (2014) 199 final, p.10

¹¹⁰ COM (2015) 453 final, p. 10.

¹¹¹ All MSs are obliged to provide data on forced and assisted voluntary returns (with unassisted voluntary returns being optional) to Eurostat. They also provide data for the same three routes (forced, assisted, unassisted) to EMN. However, it has been pointed out that UK identified inconsistencies between the data MS supplied to Eurostat and that of EMN. Thus an independent review has been called for.

¹¹² Regulation (EC) No 862/2007 of 11 July 2007, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32007R0862>

¹¹³ More detailed information regarding the analysis of the metadata, please see (European Union 2007)

At EU level, in 2014 the EMN Return Expert Group (REG) was established as a subgroup of the EMN. The aim of the REG is to create a forum to exchange expertise and good practice on (voluntary) return to improve implementation of policy in this area.

In 2008, the OECD published a paper on return migration, attempting to improve the international comparability of data on return (Dumont and Spielvogel 2008). In its report, it collects data on several indicators such as the retention rates of migrants; the distribution age at the time of return; return rates by entry category of migrants; forced returns; educational attainment of return migrants compared to that of the total population; occupation of return migrants. The data of this report has been compiled using information from OECD member countries by means of a questionnaire, and has also made use of studies produced for an expert meeting.¹¹⁴ However, the OECD notes the following limitations associated with data collection: populations registries do not register irregular migrants and there is the possibility that people fail to return as planned, or fail to even let authorities know that they have left because they would still like to hold on to certain entitlements. Data collected at border control tends to be more for immigration purposes and there is little information regarding demographic characteristics. Longitudinal surveys are more in-depth and provide better analysis behind the cause and consequences of migration, but sample sizes are small.

DG RTD has funded projects relating to return. In its policy review (King and Lulle, 2016) the following projects were reviewed:

- The MAFE (Migration between Africa and Europe)¹¹⁵ project which collected data on the characteristics and behaviour of migrants from Sub-Saharan countries to Europe. The reasoning behind the project was that the traditional one-way migration no longer holds and that return migration, circulation and transnational actions are significant and need to be recognised in policy design.
- TEMPER (Temporary vs. Permanent Migration)¹¹⁶ aims to identify the main drivers of return and circulation decision of migrants and the immigration policies have on individual decisions.
- Redial¹¹⁷ establishes a broader European network of judges dealing with return cases and corresponding legal academics from all EU MSs with a view to exchanging knowledge and experience regarding the proper implementation of the EU Return Directive.

Possibilities of indirect measurement include labour force surveys or census collected at countries of origin or of destination. The drawback of such measurements is that it is not possible to control for the date of arrival in the destination country, and therefore the length of residence in that country.

According to the EU Action Plan on Return, the Visa Information System (VIS) can help with facilitating the issuing of travel documents for return, thus collecting data on returnees. The use of VIS for return purposes seems to be at a premature stage. According to an EMN Ad hoc query¹¹⁸ it appeared that at least 9 MS (of the 15 that replied) did not have experience in using

¹¹⁴ "Return Migration and Development" Expert meeting, Paris, 12 November 2007

¹¹⁵ <http://mafeproject.site.ined.fr/>

¹¹⁶ <http://www.temperproject.eu>

¹¹⁷ www.redial.eu, co-funded by the European Return Fund.

¹¹⁸ EMN, 'Ad-Hoc Query on First Experiences with the use of the Visa Information System (VIS) for Return Purposes', Requested by COM on 10th June 2013, compilation produced on 14th August 2013 http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european_migration_network/reports/docs/ad-hoc-queries/return/483_emn_ahq_first_experiences_vis_1july2013_wider_dissemination.pdf

VIS for this purpose. The mentioned Action Plan on Return proposes changes to the Schengen Information System (SIS) by making it compulsory for MS to introduce all entry bans and return decisions into it. The EMN notes that MS do not systematically enter entry bans into the SIS, thus obstructing enforcement of the entry ban in the Schengen area.¹¹⁹ Furthermore, the study notes that there is a lack of monitoring of the use of entry bans in the SIS and doubts whether they are deleted once the period of the entry ban has lapsed.

Civil society notes that insufficient evaluations of return and reintegration programmes have been completed. Also any evaluation that is done is up to a 6 – 12 month period after return is unlikely to collect the experiences of those who had a difficult time upon return.

Approaches and solutions to overcome the gaps and challenges

There is currently an ongoing evaluation of the Return Directive, which is due to be completed by 2017. This will provide more detail as to whether and how the Directive needs to be amended. In addition, infringement proceedings are ongoing for those MS that have failed to implement it properly.

Eurostat does its best to quality control the data but perhaps it could join forces with FRONTEX which seems to provide up-to-date or on the ground data. DG JRC could be a quality provider and check to make sure that the data has been thoroughly checked.

The EU Action Plan tries to find a solution to the gap on inconsistencies of data provided by MS on return saying that a working group has been set up to further examine the inconsistencies.¹²⁰ As indicated above, it proposes changes to, or at least making full use of the Schengen Information Systems, Visa Information Systems and Eurodac. These systems contain important data to enable MS to have a better idea concerning return and irregular migration and share such information in this regard.

A need for more training for MS to be able to record return information in SIS and for more systematic entry of entry bans into the SIS could be proposed, as well as regular monitoring to delete bans which have expired. The DG JRC could play a role in providing training in this regard.

Concerning the better information flows at the operations level (ie synergies between ERIN, EURINT, EURLO and FRONTEX), DG JRC has been asked to assist by designing a system to enable such information flow, with DG DIGIT in charge of developing it. Other research could look into alternatives to detention for irregular migrants awaiting removal, such as considering the feasibility of electronic tagging, as requested by DG HOME to the JRC.

¹¹⁹ EMN, 'Good practices in the return and reintegration of irregular migrants: Member States' entry bans policy and use of readmission agreements between Member States and third countries', 2014

¹²⁰ On p. 10 of the EU Action Plan on Return, the remark on inconsistencies in the provision of data have been identified.

II. Border management

Policy and debate

With the implementation of the Schengen agreement in 1995, protection of the external borders is a joint European responsibility. Nonetheless, border management has remained a sensitive issue, where the principle of solidarity and burden sharing are difficult to operationalise. Moreover, effective border management is also dependant on cooperation with third countries EU's neighbours (Wolff 2008).

In 2015, media reported a much-feared demise of the Schengen area as the reintroduction of internal border controls. The recent analysis conducted by Guild, Brouwer, and Groenendijk, Kees Carrera 2015 posits that Schengen open borders are here to stay while the real challenge for Schengen border control is ensuring that controls are run in full compliance with fundamental human rights obligations and independent monitoring of the implementation of EU legal standards.

The Schengen Borders Code provides EU States with a single set of common rules that govern external border checks on persons, entry requirements and duration of stays in the Schengen Area. Consequently, the area of border management is broadly advanced, with technological elements as major building bricks such as the Schengen Information System (SIS), EURODAC, the European Border Surveillance System (EUROSUR), the Visa Information System (VIS)¹²¹.

Furthermore, two agencies, namely FRONTEX (2004) and eu-LISA (2012), were mandated with operational tasks in this context. FRONTEX's mission is to develop and promote best practices in border management and to coordinate joint operations, the latter becoming more prominent in the humanitarian crisis in the Mediterranean sea. A new proposal by the Commission, tabled in December 2015, aims to transform FRONTEX into a European Border and Coast Guard Agency with extended mandate on operations and with own operational staff¹²². eu-LISA has the task to maintain the proper functioning of the large scale IT systems SIS, VIS and EURODAC.

Harmonised security features for passports, residence permits and visas were introduced in 2006 in order to improve the security of these essential identity documents. Biometric features (facial image and fingerprints) reduce falsification and counterfeiting and establish a reliable link between the document and its holder. A recent initiative, the "Smart Borders" Package (SBP), suggests the establishment of an Entry/Exit System (EES)¹²³ and a Registered Traveller Programme (RTP).

The EU Internal Security Fund was established to sustain solidarity between the Schengen States by supporting those MS with a heavy financial burden in implementing common standards on external border controls.

¹²¹ More info in the section concerning data.

¹²² Among other new provisions, the new agency will have a reserve pool of 1,500 experts that can be quickly deployed to trouble spots where the EU's external borders are under threat. http://europa.eu/rapid/press-release_IP-15-6327_en.htm

¹²³ The aims of the EES is to improve the management of external borders; reduce irregular migration, by addressing the phenomenon of overstaying; to contribute to the fight against terrorism and serious crime and ensure a high level of internal security. Third country nationals arriving to the EU on short stay visas (Schengen) will have to scan their finger prints and have facial recognition upon entry of an EU border (from outside the Schengen area).

The European Agenda on Migration (the Agenda)¹²⁴ makes reference to the legislation on border management in two ways:

- By stressing the needs to fully implement the already existing legislation (e.g. exploiting capabilities of EUROSUR, or the Internal Security Fund of 2.7 billion Euro for 2014-2020);
- By proposing certain extensions to “close gaps” that were only specified to a limited extent (e.g. increasing mandate and budget of FRONTEX);
- By announcing that IT systems and technology like SIS, VIS and EURODAC shall be used in a more efficient way, in particular with respect to the envisaged Smart Borders package.

Though the relevant proposals have already been tabled and a Smart Borders Pilot completed in 2015, there are still a lot of legal and technical questions open. For example, will there be more synergies between those large IT systems, despite data protection concerns? What will be the precise usage of the additional information gained by an Entry/Exit system?

With regard to the desired full exploitation of existing means, the Agenda does not seem to define where MS fall short in this. Some examples of this could be:

- EUROSUR and SIS as voluntary “push systems”: MS can currently use them to share information with other MS but are not obliged to do it. However, efficiency depends on the amount of information that is actually shared. Potentially, this scheme could be replaced by a “pull system” in which an authority (to be nominated) acts in collecting systematically the relevant information;
- Electronic passports: the regulation for the minimum requirements on security features has foreseen the storage of fingerprints in order to establish a strong link between the document and its owner. However, the finally chosen concept for protecting the fingerprint data in the passport would require the exchange of certificates between MS that still lacks full implementation; such exchange of certificates is necessary as MS did not agree to establish a central European issuance authority (e.g. maintained by the Commission). In other areas like the European Tachograph the Commission (through DG JRC) acted successfully this way, thus avoiding the mentioned problems;
- EU citizens versus third-country nationals: there are certain border checks from which EU citizens are exempted. However, the distinction between EU and third-country citizens is effectively done on the assumed possession of a MS passport that in itself is not fully checked according to all potential security features¹²⁵.

The general debate is focused on the on-going conflict between the abolition of internal border and national security interests. As can be seen from the current suspension of the Schengen agreement in some MS, the threat is real and the Agenda does not currently address it, also because it was published before the first suspensions were going to happen.

Data availability and research gaps

Effective border management can be defined as the ability to fully decide and control who is passing the border. This implies the proper verification of the relevant ID documents on

¹²⁴ A European Agenda on Migration, (COM(2015) 240 Final.

¹²⁵ For example the so-called active authentication of the chip inside or the verification of the stored fingerprints.

entrance, temporary permissions (visas) so that those exceeding the permission can be identified.

With regard to data, the sector suffers from a lack of relevant current or future operational data (e.g. precise numbers of visa over-stayers, or appropriate biometric test data for future technical systems to be deployed). One of the main challenges with this type of data is the question of how to obtain them (either by experimental setups or through synthetic generation) and the sensitiveness with regard to data protection.

As mentioned above, a number of databases have been created to collect data, each one with its own specific purpose and specific data structure:

- EURODAC serves to identify the country of first asylum registration. It contains only fingerprints (along with data and place of registration) and no other personal information.
- SIS serves to share information amongst MS on lost and stolen travel documents, wanted or missing persons or on those persons for which entry into Schengen area is not permitted. For person alerts there may be in the future also fingerprint data attached.
- VIS as of 2011, serves for the registration and verification of short stay visas into the Schengen area. It contains full personal data, including fingerprints and face image.
- EUROSUR is a voluntary information sharing and cooperation mechanism introduced end of 2011. It shall provide Schengen countries with a common operational and technical framework, assisting them in countering cross-border crime, preventing unauthorized border crossings and diminishing casualties of migrants at sea.

Apart from these EU-level databases there are a couple of further databases that are consulted during border control, such as national law enforcement databases or the Interpol database, most of them on lost and stolen documents.

Schengen turns out to be effectively a mixture of commonly binding rules, voluntary activities and responsibilities under national sovereignty. This mixture is reflected in the mentioned IT systems and related concepts (including the work of agencies) and explains their gaps and limits.

Indeed, due to data protection principles, these databases are not synchronised. As a consequence, the full spectrum of queries could reveal in certain cases inconsistent or even contradictory information. This applies in particular to alphanumeric data (transliteration problems or false registration), but also to biometric data (certain incompatibilities due to different enrolment schemes).

In addition, while there is comprehensive data captured and processed at entry to the EU, there is almost no data on departure. In particular, there was so far no systematic check whether and when third country nationals with visa requirement have left Europe within the validity time of the visa. The planned Entry/Exit system (as part of the Smart Borders package) shall change this, but the corresponding legislative debates lack reliable data on this phenomenon. Moreover, there is currently no common European policy to deal with potential cases of over-stayers. Thus, clear purpose and accuracy of data remains an issue.

In short, due to information being stored separately in each system, the lack of interconnectedness between systems and data privacy concerns, the EU's IT border control systems is fragmented.

The Smart Borders package aims to diminish those gaps and limits, thus rebalancing the mixture towards more binding rules. However, criticism of the new package include, for example, by Spijkerboer and Last (2015), the analysis of the package leads to three observations: 1) inability of the European Union to develop a functioning asylum system, considered to be the root cause of the ‘migration crisis’; 2) the permanent intensification of visa policy measures led to an ever increasing demand for human smuggling, and the new proposal presents the same policy; 3) in response to border fatalities the proposal is to intensify current restrictive migration policies.

Approaches and solutions to overcome gaps and challenges

There are already a large number of useful elements available, yet efficiency could be improved. Proper design of technical systems will require appropriate recognition of the various positions of relevant stakeholders and whether these positions could be potential “showstoppers”, as well as the involvement of unbiased technical advice from the earliest point in time.

Nonetheless, IT systems and technology cannot replace the needed solidarity in the EU, but systematic information exchange, full exploitation of existing security concepts, and attempts to combine these elements in a more efficient way could help to better manage migration and reduce fears. The proposal in the Agenda to use in a more efficient way the IT systems and technology could be moved toward a central data repository with appropriate access rights in accordance to relevant data protection legislation.

Most of the mentioned systems involve biometric data that is supposed to provide unambiguous distinction of individuals. The accuracy of this distinction is usually called “biometric performance” as the distinction is performed by an automated IT system. There is a standardised way of estimating the performance of a system but this estimation strongly depends on the required test data. The strong deviations between performance claims of vendors (measured with own test data under laboratory conditions) and real performance of the deployed systems have been observed. It is therefore decisive for the proper and timely deployment of technological solutions that accompany policy to have appropriate test data available. The closer the characteristic of that data is to the expected later operational data, the more effective specification and design of the technology in question can be accomplished.

DG JRC has been successful in providing biometric test data, in particular in relation to children.¹²⁶ The fingerprint data were useful in two ways: feasibility of fingerprint recognition could be demonstrated (directly exploited for the revision of VIS regulation) and the quality of operational data (taken in the context of issuing passports) could be investigated.

Further proposals for which the DG JRC could have an active role:

- Demonstrate that central systems (according to the Communication on "Stronger and Smarter Information Systems for Borders and Security" COM(2016) 205) can be implemented in a privacy friendly way. Experience gained by US authorities in the context of their national border control systems could be taken into account;
- With regard to technical systems (databases, biometric sensors, algorithms) there exist standards covering parts of it but not fully. For example, there are standards for biometric components but no standards covering full systems involving biometric components. The

¹²⁶ Thanks to an agreement with the Portuguese government in 2009, the DG JRC could analyse fingerprint data of children.

DG JRC, in cooperation with FRONTEX, develops currently security evaluation guidelines for Automated Border Control systems and aims to promote these guidelines as minimum requirements for all such deployments in Europe.

- The establishment of a European Biometrics Expertise Group (as a central EU reference point) could be explored.

III. Asylum and protection

a. Common European Asylum System (CEAS)

Policy and debate

In force since 1999, the idea behind the CEAS is that asylum seekers upon entering a MS should be treated equally under an open and fair system independent of the MS in which they arrive¹²⁷. The harmonisation of the asylum process across MS was also seen as a way to limit the phenomenon of 'secondary movement' where asylum seekers were thought to move on to another MS, to benefit from a more generous social welfare system (Garlick, 2010).

The CEAS has been supported by many milestones: the Asylum Procedures Directive¹²⁸; the Dublin Regulation¹²⁹ and its accompanying EURODAC system¹³⁰; the Reception Conditions Directive¹³¹; the establishment of the European Asylum Support Office (EASO) in 2010; the Temporary Protection Directive¹³²; the Qualification Directive¹³³. Furthermore, significant convergence towards common standards has been achieved thanks in part to the Court of Justice of the European Union, which has helped clarify ambiguities. However, the mass influx of asylum seekers has revealed failings in harmonisation, causing the system to move towards fragmentation rather than unification.

One of the biggest discussions concerning the CEAS has been the lack of proper implementation across MS.¹³⁴ A factor hindering its implementation is the current mass migration influx, which the CEAS is ill-equipped and unable to operate effectively in such a climate¹³⁵. Matters are not helped by the fact that there seems to be a lack of trust and insufficient political will by MS to support EU measures designed to tackle such influx (e.g. the re-introduction of border controls in the Schengen area, the slow relocation of asylum seekers). The UNHCR High Commissioner Grandi has said that there has been complete failure of European cooperation and solidarity with respect to the registration and distribution of refugees (Sattar, 2016). Moreover, positive public opinion towards the handling of the refugee flow is dwindling. According to the Eurobarometer (European Commission 2015a), negative feelings towards immigration of people outside the EU has increased to almost 60%. This makes it unlikely that the political resistance against CEAS will vanish, with 24% of EU population against it.

¹²⁷ Except for DK, IE and UK.

¹²⁸ Directive 2013/32/EU on common procedures for granting and withdrawing international protection.

¹²⁹ Regulation No. 604/2013, of which its main principle is that the country that the asylum seeker first applies for asylum is responsible for either accepting or rejecting asylum, and the seeker may not restart the process in another jurisdiction.

¹³⁰ The fingerprint database to identify asylum seekers and irregular migrants.

¹³¹ Directive 2013/33/EU laying down standards for the reception of applicants for international protection.

¹³² Directive 2001/55/EC on minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between MSs in receiving such persons and bearing the consequences thereof. However, it is to be noted that the provisions are yet to be triggered.

¹³³ Directive 2011/95/EU on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted.

¹³⁴ In July 2015, infringement procedures launched against 19 MSs for failing to transpose into national law the EU Directives that make up the CEAS.

¹³⁵ This was highlighted in the seminar, 'Beyond the Dublin System: A new common European Asylum Scheme?' at the CEPS Ideas Lab, 25 – 26th February 2016.

There has been widespread agreement that the Dublin system has failed to provide a fair and sustainable solution to the uneven distribution of asylum seekers across the EU and that its revision is necessary (ECRE 2015; Guild et al. 2015; Mouzourakis et al. 2015). The European Political Strategy Centre (EPSC, 2015) concludes that the current political and humanitarian turmoil is due, to a large extent, to an EU asylum system that allows asylum applications only on EU soil.

At the moment, only negative decisions are mutually recognised. However, there is strong support towards the mutual recognition of positive asylum decisions¹³⁶, seen as a necessary step towards harmonisation, that could also mitigate the negative impact of the Dublin system on individual asylum seekers (Guild et al. 2015). In order to do so, there is agreement that a legislative change will be necessary (ECRE 2014).

Furthermore, there are major asymmetries among the MS regarding the reception, recognition, integration conditions and future prospects for asylum seekers and refugees (Toshkov and de Haan 2013; Aiyar et al. 2016, 41–44; Bank 2014; Mouzourakis et al. 2015; Guild et al. 2015). These asymmetries are due to a number of factors: MS austerity and budgetary constraints to assist asylum seekers and refugees; the number of asylum seekers and refugees; public attitudes towards migration (which highlighted above is increasingly negative); the growing diversity of the home population; as well as the historical experience with immigration and the way in which this experience is treated by politicians, the media and civil society (Triandafyllidou 2011; Van der Brug et al. 2015).

Perhaps unexpectedly, private sector funding, citizens' initiatives and social media have all played a tremendous role in reception and resettlement, for example the private shipping sector involved in rescuing people at sea (AFP 2015).

The European Agenda on Migration (the Agenda)¹³⁷ clearly recognises the need to revise the Dublin Regulation and this revision has been decided. Nevertheless, the overall focus of proposed measures in the Agenda tends to be on better monitoring of the Regulation and on improving identification mechanisms (including increased efficiency in fingerprinting asylum seekers). Mutual recognition of positive asylum decisions and the role of the private sector are not discussed. In addition, the Agenda does not necessarily touch on how to deal with the social tensions (and scaremongering by the media) that derive from such an influx of asylum seekers, apart from the call for integration. Thus, in this respect, the Agenda appears to touch on some of the issues above to a limited degree, and none on others.

Data availability and research gaps

Annex 2 provides the main databases and data sources concerning asylum, ranging from asylum trends and population movements and the current implementation of relocation and hotspots.

The first overall remark is that there is a significant amount of global data on migration available.¹³⁸ However, it is still difficult to distinguish between data concerning asylum seekers and that of migrants arriving to the EU for other reasons. Moreover, if there are data available on asylum seekers, it is only due to them being registered. Consequently, there are an unknown

¹³⁶ This was also highlighted at the CEPS conference 2016 as referenced above.

¹³⁷ A European Agenda on Migration, (COM (2015) 240 Final).

¹³⁸ This includes also a large variety of analysis, such as the one produced by OECD regarding indicative statistics on the education levels of asylum seekers and refugees, or on unaccompanied minors.

number of cases where such registration was impeded, e.g. in cases where proper border control was suspended due to extremely large numbers of immigrants.

King and Lulle (2016) note that there is still little theory formulated behind asylum, partly because as a field of theory, it is still relatively recent, having only emerged as a distinct one in the 1980s. Another factor could be that research involving refugees and vulnerable populations in general pose particular moral and ethical challenges (Schweitzer and Steel 2008). Detailed case studies beyond simple counting of numbers require the proper recognition of these challenges.

Regarding the relationship between quantitative and qualitative data, there appears to be a disconnection between the two. The quantitative data on asylum seekers and refugees' stocks and flows provide limited information about their demographic characteristics. The qualitative data demonstrates refugees and asylum seekers' motivations and experiences in Europe. Although both categories of data are crucial for designing asylum policies, at present, policy-making relies heavily on the former. Researchers employing qualitative methodology and providing potentially important insights for policy find it hard to communicate the results of their studies in a way that would attract policy-makers' attention.

A team of NGOs¹³⁹ that have been monitoring asylum procedures, reception conditions and detention in 18 European countries for the past three years and produce AIDA¹⁴⁰ annual reports points to the lack of reliable and accurate statistical data concerning the progress of the CEAS: for instance, in how the Dublin Regulation is applied by MS; and concerning the use of detention or accelerated procedures. Regarding the latter, the current data on detention of asylum seekers is incomplete and inaccurate in many MS, it is often part of general statistical information on the detention of third-country nationals in an irregular situation.

While analysis of statistical data is becoming more and more important in the development of the EU's asylum and border-management policy, these gaps prevent a reliable analysis of real and perceived outputs of the EU's asylum instruments (Mouzourakis et al. 2015).

There is also a lack of detailed statistics on the cultural and educational background of asylum seekers, apart from studies done by individual researchers. Thus, the available material may vary in scope and terminology due to individual approaches and selection of sources. Incomplete knowledge in this area can give rise to stereotyping and irrational fear of asylum seekers. Linked to this is also the public perception of asylum seekers. King highlighted the need for more research on public opinion of migration.¹⁴¹ Even though the Eurobarometer does do surveys into this perception, its data has limits. The survey results are estimations, the accuracy of which depends on the sample size, which tends to be quite small.

Approaches and solutions to overcome gaps and challenges

At the policy level

¹³⁹ Including the European Council on Refugees and Exiles (ECRE)

¹⁴⁰ Please refer to Annex 2 regarding the AIDA database.

¹⁴¹ This was a conclusion made by Professor King at the European Commission DG Research and Innovation's recent conference, *Understanding and Tackling the Migration Challenge: The Role of Research*, 4 – 5th February 2016 <http://ec.europa.eu/research/conferences/2016/migration-challenge/index.cfm>

In terms of managing the large numbers of asylum seekers responsibly, the EPSC proposes that, as an interim solution, the EU should promote the expanded use of humanitarian visas or humanitarian admission to grant short-term residence in receiving MS, a proposal promoted by UNHCR.

Concerning the redistribution mechanism of asylum seekers, the EPSC proposes the creation of a solidarity framework in which MS have to agree to accept a minimum number of relocated refugees. A “solidarity scoreboard” could be created in which the distribution figures are determined in relation to a number of criteria. In other debates, any technical solution to improve the redistribution mechanism has to be underpinned by a careful consideration of socioeconomic and political dimensions of the process to ensure the acceptance of all MS. The political dimension has to be tackled through negotiations between the EU and the MS based on the recognition of the peculiarities of each country. The socioeconomic considerations could, among other things, include an analysis of economic impacts of increased refugee flows on the EU host countries (OECD 2015a; Huettl and Leandro 2015; Aiyar et al. 2016) and the assessment of current and future skills shortages in the host countries. The DG JRC could provide support by modelling different criteria to be associated to the level of absorption of each MS.

Moreover, instead of forcing the asylum seeker to relocate, which in itself is traumatic, new ways of involving asylum seekers in determining their destination could be explored (Guild et al. 2015). For example, by making sure that special links that go beyond nuclear family ties or specific skills of an applicant are taken into account (Mouzourakis et al. 2015). This has already been recognised in a recent Council decision¹⁴² establishing provisional measures in the area of international protection for the benefit of Italy and Greece.

As for the private sector, support of its involvement in areas ranging from search and rescue at sea to reception and resettlement could be beneficial to CEAS. Taking account of the increased accountability and transparency advantages of multi-actor arrangements, the EU's Fundamental Rights Agency has recommended an official role for the private sector in resettlement, including the possibility to introduce and/or support resettlement applications for individuals in need in regions of conflict through private sponsorship schemes (FRA 2015).

To counter negative profiling, the EPSC proposes a “partnership with an informed public”. Given that the migration challenge is particularly prone to stereotyping and resulting social tensions, recourse to the facts is needed.

At the data level

The authors of the AIDA report (Mouzourakis et al. 2015) suggest that the Commission should take steps to ensure that MS comply with their obligations to communicate statistical data in accordance with the Migration Statistics Regulation.¹⁴³

As highlighted above, if steps are to be made towards the mutual recognition of positive decisions throughout the EU, more data are needed on the dynamics of these secondary movements to really determine what could be their impact. Data about the effects of refugees' and asylum seekers' secondary movements could be gathered through longitudinal panel

¹⁴² Council Decision (EU) 2015/1601 of 22 September 2015. The decision takes note that “*specific account should be given to the specific qualifications and characteristics of the applicants concerned, such as their language skills and other individual indications based on demonstrated family, cultural or social ties which could facilitate their integration into the MS of relocation.*” p.8.

¹⁴³ Regulation (EC) No 862/2007.

analyses in which data would be collected over time about the same individuals, mapping their trajectories. This would be extremely useful to understanding the extent, rationale and effects of their secondary movements but also more broadly the specific dynamics of the refugee integration.

The revision of the relocation process would benefit from better data about the structure of the refugee population which would go beyond their country of origin, gender and age. More than a year after the mass influx of asylum seekers to Europe began, we still lack comparable and reliable data on their education, skills and work experience covering asylum seekers and recognised refugees in all major EU host countries. The existing data is based on surveys carried out in some of the MS (OECD 2015b). One area of DG JRC's contribution might be to devise a mechanism of pooling together the available data from different sources (e.g. pre-war surveys of Syrian population, smaller-scale surveys of refugees in different EU countries, etc.) to quickly produce at least some indicative answers to questions about the composition of newly arrived asylum seekers.

Alongside quality data, a foresight process, facilitated by DG JRC, could help enrich the discussions about the necessary steps and options available for achieving an actual common European asylum system. For example, back-casting is a participatory foresight method used in complex situations where there is a desired future vision (i.e. achieving CEAS) but it is unclear how to reach it. It can be particularly effective in the context of a fundamentally uncertain future in which unexpected events can dramatically influence the success in reaching the desired objectives. Once the objectives are agreed, stakeholders explore alternative solutions, different pathways (i.e. scenarios) and identify the bottlenecks. Such a process could help create an open space for safe exploration of new and innovative policy solutions and provide an opportunity for exchange among diverse stakeholders who are instrumental for the success of the CEAS.

The EPSC suggests the establishment of a European Observatory on Migration, following the model of the Migration Observatory of University of Oxford. Data and information on asylum seekers needs to be structured in way that can help lead the public debate. This would require the establishment of a reliable network of relevant organisations across Europe, at regional or European level. An observatory, as part of the envisaged Commission Knowledge Centre, would process and evaluate the acquired data and derive credible conclusions and recommendations. It would also continuously refine the list of knowledge gaps to which the observatory could respond to.

In response to the EPSC's suggestion to process asylum applications in some third countries, DG JRC could perform a particular feasibility study on remote asylum applications, such as the possibility for Syrian refugees to apply under CEAS in Lebanon or Turkey.

DG JRC is currently assisting DG HOME in the revision of EURODAC. It is investigating how current practices for the biometric registration of asylum seekers in the context of EURODAC can be improved by: addressing fingerprint enrolment; how to overcome the problems with data quality and recognisability; as well as the feasibility of alternative biometric identifiers such as face and iris.

III. Asylum and protection

b. Additional: Unaccompanied Minors

Policy and debate

According to Save the Children, an estimated 26,000 unaccompanied children entered Europe in 2015.¹⁴⁴ Europol stated that during the last 18-24 months around 10,000 refugee children went missing (The Observer 2016), half of them disappeared in Italy alone. Many are feared to have fallen into the hands of traffickers, but generally their fate is simply unknown. These worrying statistics shed light on the vulnerable situation migrant children are faced with.

The European Migration Network (EMN 2015) concluded that the number of unaccompanied minors (UAMs) seeking asylum in the EU has increased steadily since 2010, reaching a total of 24,075 minors in 2014 or 4% of the total number of asylum applicants in 2014. 86% of these UAMs are boys; 65% of these minors are between 16 and 17 years old, with only a small proportion being less than 14 years old. Furthermore, the number of UAMs who arrive in the EU and not seeking asylum is largely unknown. However, data from a few MS indicate that they were more than 8,500 in 2013.

It is crucial to recognise that for both sexes the status of being an UAM renders young people particularly vulnerable and exposed to exploitation and that they should receive targeted support that follows the ‘best interest of the child’ approach. However, the debate about unaccompanied minors should reach beyond the notion of vulnerability and wider and long-term implications of their growing numbers in Europe should be considered.

Since 2009, the EU has introduced a number of policies and legislation towards the protection of UAMs: the Action Plan on Unaccompanied Minors¹⁴⁵ and the Common European Asylum System (CEAS),¹⁴⁶ as well as the recast of the Asylum Procedures,¹⁴⁷ Reception Conditions¹⁴⁸ and Qualification Directives;¹⁴⁹ the Dublin III Regulation;¹⁵⁰ and the Anti-Trafficking Directive.¹⁵¹ Despite the strengthening of protection, there remain gaps (EMN 2015). Namely, that asylum and non-asylum seeking UAMs constitute two different legal categories and thus receive discriminatory treatment when entering the EU. This is despite the fact that some UAMs leave their countries on humanitarian grounds yet may not provide this information to the competent authorities due to trauma or other reasons.

In addition, asylum systems in many EU MS remain ill-equipped to address the needs of the growing number of vulnerable asylum seekers, including UAMs (Mouzourakis et al. 2015; Guild et al. 2015; King and Lulle 2016). The EMN highlights a number of deficiencies in this regard (EMN 2015): lack of specialist training for police or border guard authorities in identifying UAMs nor in safeguarding children; little support for children turning 18 (and thus having impact on their legal status in the country); no common EU guidelines on assessing age; the need for MS to be better at recording disappearances and at preventing them. The study

¹⁴⁴ Save the Children, Response to the IDC report on Syria, 5th January 2016, <http://www.savethechildren.org.uk/2016-01/response-idc-report-syria>

¹⁴⁵ COM(2010)213 final

¹⁴⁶ Discussion of the CEAS is in Chapter III.a.

¹⁴⁷ (2013/32/EU recast).

¹⁴⁸ (2013/33/EU recast).

¹⁴⁹ (2011/95/EU).

¹⁵⁰ (604/2013).

¹⁵¹ (2011/36/EU).

also identified certain gaps in the collaboration and cooperation that takes place between the various authorities dealing with UAMs in the MS, during border control and reception stages, as well as the follow-up of disappearances. Finally, good practices are not systematically shared or developed towards common binding practices.¹⁵²

The issue of the rising number of unaccompanied children is tackled marginally in the European Agenda on Migration (the Agenda) with the promise to pay particular attention to the needs of vulnerable groups, such as children. The Commission however will develop a comprehensive strategy to follow up on the Action Plan on Unaccompanied Minors (2010 - 2014) to cover missing and unaccompanied children.

Data availability and research gaps

Annex 2 provides the available statistics on UAMs at international, EU and national level.¹⁵³ Immigration authorities, local NGOs and child protection authorities hold data on the total number of UAMs, including some figures on those that are not intercepted at reception centres or those who turn 18 years.

In 2010, the Action Plan on Unaccompanied Minors highlighted the problem of reliable data (beyond those collected by Eurostat on registered asylum applications) and looked to stronger cooperation between MS, relevant agencies (mainly FRONTEX, EASO and Europol) and the Commission to strengthen it. As of 2015, the EMN has detailed information about UAMs, at least with respect to those who claim asylum. The existing data is regularly updated by input from MS, based on a common template (EMN 2015; EMN 2014a).

However, the EMN (2015) also revealed a general lack of comprehensive and comparable data on the numbers of and outcomes for UAMs receiving some form of protection in the EU. The current obligation for MS to provide annual data only on UAMs applying for international protection restricts the scope for properly assessing the situation of all UAMs arriving in the EU.

Approaches and solutions to overcome gaps and challenges

To overcome the mentioned challenges, the EMN (2015) recommends:

- Systematic collection from MSs of annual disaggregated data on UAMs who are not applying for international protection¹⁵⁴;
- Development of a standardised method to record the disappearances of UAMs;
- Development of common indicators on outcomes for UAMs turning 18 years of age;
- Elaboration of durable, long term solutions for UAMs, both asylum and non-asylum seeking and of monitoring methods to evaluate them.

¹⁵² For example, Ireland does not refuse entry to any UAM, regardless whether an application for asylum is filed; Spain and The Netherlands have the practice to provide specialised staff who guide UAMs through all necessary processes; UK has set up care standards for UAMs/ children, as well as robust monitoring and accountability measures.

¹⁵³ Some relevant studies to mention on the topic have been produced by OECD (available at <http://www.oecd.org/migration/Is-this-refugee-crisis-different.pdf>), IOM (available at <https://publications.iom.int/books/unaccompanied-children-move>) and IOM / UNICEF (available at http://www.iom.int/sites/default/files/press_release/file/IOM-UNICEF-Data-Brief-Refugee-and-Migrant-Crisis-in-Europe-30.11.15.pdf).

¹⁵⁴ Currently, only seven MSs could provide data on the numbers of UAMs arriving in Europe and not seeking asylum.

DG JRC could very much contribute to filling certain gaps:

- Provide support for the further systematic collection of data on UAMs, in particular with respect to those not applying for asylum. The data repository could become an integral part of the envisaged Knowledge Centre. DG JRC would need to liaise with relevant stakeholders and MS authorities.
- The problem of disappearance could be addressed by more systematic and comprehensive immediate (“first 24 hours”) registration of UAMs, in particular with fingerprints for later re-identification. According to existing and ongoing research of DG JRC,¹⁵⁵ the minimum age of 14 years could be significantly reduced. It would be necessary to verify the technical feasibility for the expected type and quality of data, including some field trials.
- Further research could be provided on the problem of age assessment in general, essential for the identification as “minor”. DG JRC has done already some research on age identification in the area of “child sexual abuse online”.¹⁵⁶ If robust indicators will be developed, intrusive (and expensive) examinations could be avoided. In any case, cooperation with medical research stakeholders would need to be established.
- The sharing of good practices could also be adopted by the envisaged Knowledge Centre. Potential relevant stakeholders to be liaised with, apart from MS authorities, are NGOs addressing specifically UAMs, e.g. the German Federal Association for Unaccompanied Minor Refugees, Unicef or Save the Children.

¹⁵⁵ For example, wkp 3534, Fostering Accurate Biometric Systems; there is also work being done in the context of EURODAC, which is wkp 3769, Secure and ethical registration of Asylum seekers.

¹⁵⁶ Wkp 560, Authors and Victims Identification of CSA On-Line.

IV. Legal migration

a. Additional: access to and quality of data

Policy and debate

Regular migration data are essential to understand and inform policy about patterns and emerging trends on international migration. Migrants are defined by international statistical standards (*Recommendations on Statistics of International Migration* 1998) as persons changing their country of usual residence; and long term migrants are persons who change their country of residence for more than one year. It is however both the national and international definitions of a 'migrant' that inevitably causes data inconsistencies and incompatibilities, as discussed further in the data section.

The matter of being able to access good quality data on regular migrants is not explicitly mentioned in European Agenda on Migration (the Agenda)¹⁵⁷ except for a short reference to the data access from the European Border Surveillance System (EUROSUR), which "*enables near real-time sharing of border-related data between members of the network, consisting of Schengen countries and Frontex.*" Despite the lack of reference, it must be recognised that having harmonised and consistent data is essential to manage and evaluate the Agenda's policies and initiatives.

In this respect, it is relevant to continue supporting activities aimed at improving the accessibility and quality of data on migration. At EU level, there were two such research projects funded under the 5th and 6th Framework Programme, respectively, COMPSTAT¹⁵⁸, PROMINSTAT¹⁵⁹ and THESIM¹⁶⁰. It would be desirable to further develop these projects to address in particular the gaps concerning the comparability and consistency of migration data. As a result, this will contribute to better informed policy decisions.

Data availability and research gaps

Annex 2 highlights the main sources of migration data at international and national level.

To complement the data provided in official statistics by international organisations and national registers, there are several up-and-coming initiatives to understand migration and mobility trajectories (Gerland 2015). This big data can be sourced from phone records; mobile phone traffic; email logins; social media; search engines; online banking. While still at its infancy in respect of policy applications, big data can offer opportunities to understand better general mobility patterns, to provide information on location and to explore social interactions of individuals. The main obstacles linked to collecting such data are phone coverage, as well as privacy and confidentiality concerns.

¹⁵⁷ A European Agenda on Migration, (COM(2015) 240 Final).

¹⁵⁸ Comparing National Data Sources in the Field of Migration and Integration <http://research.icmpd.org/research-home/projects/migration-statistics/compstat/>

¹⁵⁹ Promoting Comparative Quantitative Research in the Field of Migration and Integration in Europe <http://www.prominstat.eu/drupal/node/64>

¹⁶⁰ Towards Harmonised European Statistics on International Migration <http://research.icmpd.org/research-home/projects/migration-statistics/thesim/>

The most common research problem encountered is that it is not easy to compare international data: "*official international migration data collected by national statistics institutes, and collated by Eurostat and the United Nations, are not directly comparable due to differences in definitions, measurements and data collection procedures*" (Sander, Abel, and Bauer 2014) . As Lemaitre notes "*...the same permit duration threshold may encompass migration flows of very different character in different countries. International statistics which ignore or take no account of this basic fact will tend to be of questionable comparability*" (Lemaitre 2005, 6).

This is due to a number of reasons, of which some are highlighted here. First, there is confusion as to who is a regular migrant. Most definitions of migrants are based on being born in or being a citizen of a foreign country or a combination of these two. In some cases, the country of residence for a certain period before arrival is considered as the country of origin. The differences in migration and citizenship laws can classify a person as a migrant in one country, and yet as a non-migrant in another.¹⁶¹ Therefore, this causes inconsistencies and lack of comparability in the data. Secondly, different approaches are used in different countries to collect the data, an example being data on resident permits.¹⁶²

Whilst migrants stocks are more easily available and normally part of population statistics, identifying the number of people migrating in a given year between countries is more challenging as this requires reconciling data between incoming and outgoing flows and other demographic components.

At the EU level, despite quite comprehensive data available, the understanding and modeling of migration patterns and determinants, as it is the case of international trade (Anderson and van Wincoop 2003), requires considering not only one-way migration flows but also the wider global context to account for all possible destinations and migration routes.

Another limitation on collecting information about migrant flows is that virtually no information on it is available at local level. This is a phenomenon that has been noted, that migration forecasts are done at national level, yet the impact is at local level.¹⁶³ This hinders the possibility to analyse the high concentration of migrants in certain areas or towns where actually most problems of integration occur.

Furthermore, there is limited data available on migrants' characteristics such as age, gender, education skills, occupation, wages, and other social-economic information. This type of information is critical for being able to conduct meaningful policy analysis linked to the integration of migrants into labour markets or their social-economic performance.

Finally, an effective way of analysing whether the migration has been beneficial for the migrant or their offspring is via longitudinal data.¹⁶⁴ Most longitudinal data on migrants are collected

¹⁶¹ For example, naturalised persons whom may be granted citizenship after a certain period of residence would be still classified as migrants under the foreign born approach but not under the citizenship one.

¹⁶² As noted by Eurostat, "*certain methodological aspects are not fully harmonised between the reporting countries due to different legal or IT systems. Therefore, the data availability may differ between countries and the interpretation of the figures resulted should be done with the help of metadata file related to Residence Permits Statistics.*" http://ec.europa.eu/eurostat/statistics-explained/index.php/Residence_permits_statistics

¹⁶³ This was a conclusion made by Professor Bridget Anderson, of Oxford University, at the European Commission DG Research and Innovation's recent conference, Understanding and Tackling the Migration Challenge: The Role of Research, 4 – 5th February 2016 <http://ec.europa.eu/research/conferences/2016/migration-challenge/index.cfm>

¹⁶⁴ Sometimes referred to as panel data, longitudinal data "*track the same sample at different points in time. The sample can consist of individuals, households, establishments, and so on. In contrast, repeated cross-sectional*

with panel surveys or from administrative sources. There are, however, some limitations to longitudinal survey data. First, they are costly compared to cross-sectional sample surveys.¹⁶⁵ Secondly, there is also the challenge of panel attrition when respondents from the original sample do not respond to subsequent surveys. Thirdly, the issue of sample attrition is expected to be more acute in the migrant population, who tend to be more mobile and harder to contact in subsequent data collection.

Approaches and solutions to overcome gaps and challenges

Harmonisation

There has been some progress in harmonising the collection of data: adapting national definitions to internationally recommended ones, such as the Migration Statistics Regulation¹⁶⁶. However, the latter has not brought about the expected results (Eurostat 2014).¹⁶⁷ Therefore, additional actions have been taken, such as the discussion on the impact of different definitions of migration (Thorogood 2012) and more recently on new forms of migration, e.g. in UNECE Task Force on Circular Migration.¹⁶⁸ Alternative data sources have been explored by the Suitland Working Group.¹⁶⁹

It is recommended that harmonisation of different data sources be promoted in order to generate more consistent migration statistics. An example of this attempt was the 6th Framework Programme PROMINSTAT project, which conducted in-depth analyses of the scope, quality and comparability of statistical data on migration in a wide range of thematic fields (e.g. population stocks and general demographic characteristics, migration flows, residence permits). DG JRC could be in a good position to take it over.

DG JRC could also be involved, together with Eurostat, in promoting cooperation to harmonise definitions and methodologies on migration data. Since this may require international coordination, this activity may be better suited to be carried out by a regional stakeholder such as the European Commissions' Knowledge Centre on Migration and Demography.

Furthermore, there could also be better coordination of the information flow on data needs between users and producers of migration statistics. DG JRC could also be in a good position to take on such coordination.

data, which also provides long-term data, gives the same survey to different samples over time."
<https://www.nlsinfo.org/content/getting-started/what-are-longitudinal-data>

¹⁶⁵ "Cross-sectional research involves using different groups of people who differ in the variable of interest but share other characteristics, such as socioeconomic status, educational background, and ethnicity."
<http://study.com/academy/lesson/cross-sectional-research-definition-examples-quiz.html>

¹⁶⁶ European Commission (2007) European Parliament and the Council of European Union Regulation (EC) No 862/2007 of the European Parliament and of the Council of 11 July 2007 on Community Statistics on Migration and International

Protection and Repealing Council Regulation (EEC) No 311/76 on the Compilation of Statistics on Foreign Workers, Official Journal, L 199.

¹⁶⁷ As Lemaitre notes, "it has proven to be exceedingly difficult to bring about the required changes to data collection and processing in order to produce statistics according to international guidelines, especially since the statistics currently produced are generally considered adequate for national needs" (Lemaitre 2005, 6)

¹⁶⁸ For terms of reference, see

<http://www.unece.org/?id=32321>

¹⁶⁹ For more information, see <http://www.unece.org/stats/groups/suitland/suitland.html>.

Production of migration data

It is recommended that such production should be based on different sources not only on exhaustive compilation of records from primary data sources, but also on estimates (outcomes of probabilistic statistical models) from sampling surveys.

Quantifying migration flows

Concerning the difficulty about quantifying migration flows at the international level, this issue has been addressed by researchers by reconciling migration flows with stock data through statistical models. For example, the Integrated Modelling of European Migration (Raymer et al. 2012) is a Bayesian model to correct inconsistencies on the availability definitions and quality of official reporting systems. The model focuses on migration flows between the EU MS and EFTA countries between 2002 and 2008. The Institute of Applied Systems Analysis (IIASA) (Abel and Sander 2014) has developed a model to estimate the global bilateral migration flows required to match the sequential stock tables published by the United Nations for the period 1990-2010.¹⁷⁰ DG JRC could strengthen its partnership with IIASA on migration and demography analyses.

Longitudinal surveys

Regarding the limitations of longitudinal surveys, alternatives exist. Cross-sectional data sources comprising immigration and socio-economic information are generally more available than longitudinal data sources. However, even in the absence of longitudinal data, the longitudinal perspective can be achieved: (1) by using cross-sectional data from census or surveys which ask the same question at different stages; (2) by asking retrospective questions about how and when a characteristic changed through time. When the same socio-economic concepts are repeatedly measured in cross-sectional data, indicators can be presented to illustrate trends and patterns or change between time periods, although straightforward causative interpretations of associations are incorrect in such cases.

Another alternative already applied by some countries is the creation of longitudinal data through data linkage, such as linking different administrative data to population registers (e.g. Norway and Denmark), or linkage between censuses and administrative data sources (e.g. Canada and Australia). Thanks to these methods, socio-economic indicators for migrants can be derived over time (United Nations Economic Commission for Europe 2015).

Due to limited information on the socio-economic characteristics of migrants, it is recommended that longitudinal studies are conducted also to provide such data.¹⁷¹ This would be important not only for top-level aggregated figures but also for the whole set of disaggregated data (Eurostat 2014).

¹⁷⁰ See Annex for details on methodology.

¹⁷¹ Examples of such single country studies are the United Kingdom Household Panel (<https://www.understandingsociety.ac.uk/about/ethnicity>) and the German Socio-Economic Panel (SOEP) (http://www.diw.de/en/diw_01.c.422167.en/iab_soep_migration_sample_just_started.html).

IV. Legal migration

b. Additional: Demography

Policy and debate

According to the UN World Population Prospects,¹⁷² the world's population is set to rise beyond 9.6 billion by 2050 and the population of the least developed countries is projected to surpass the population of the more developed regions by 2035. This demographic change will be shaped by decreasing birth rates and increasing life expectancy, together contributing to demographic ageing at a global scale.

The EU's demographic changes also mean that the proportion of workers supporting those in retirement will halve from an average of four today, to just two, by 2060 (European Commission 2015). Whilst Europe may experience a declining population, Africa's will be on the rise and it is projected that more migrants than before will come from this continent.¹⁷³ Replacement migration is known as the international migration that needs to take place to offset a declining population as a whole (including the working population).¹⁷⁴ This replacement may be necessary to meet the EU's demographic challenges.

A topic that is fiercely debated is ageing and its impact on public policy. Currently, the EU population is rapidly ageing and the working age population is expected to decline at an annual average rate of 0.4% over the coming four decades (European Commission 2015b). Studies have shown that in developed countries, it costs more to support over 65 year olds than to support a person younger than 20.¹⁷⁵ However, cognitive decline is shifting to later in life, in particular for better educated people who remain mentally and physically active.¹⁷⁶ Therefore, one public policy question concerns whether the retirement age should be extended. Policies on retirement will also have an impact on migration policy.

These trends will have major implications on public spending, particularly of health and residential care. International migration and internal mobility will thus become increasingly important in addressing economic convergence and growing demographic disparities.¹⁷⁷

At the EU level, the European Agenda on Migration (the Agenda) does not consider the topic of demography, even though it is clear that migration will have an impact on demographic trends and vice versa. However, there are initiatives amongst the DG services e.g. DG HOME has recently established a migration information hub which is looking at demographic trends.

¹⁷² <http://esa.un.org/unpd/wpp/>

¹⁷³ As noted in the EUI Forum on Migration, Citizenship and Demography, 4 – 5th February 2016, <http://www.migrationpolicycentre.eu/eui-forum-migration-citizenship-demography-follow-up/>

¹⁷⁴ 'Replacement Migration: Is It a Solution to Declining and Ageing Populations?' <http://www.un.org/esa/population/publications/migration/migration.htm>

¹⁷⁵ The UN DESA refers to a number of studies, albeit they are from the 1990s.

¹⁷⁶ As noted in the presentation, 'Europe's demographic future: 4 Dimensional scenarios for assessing the impacts of migration, by Professor Wolfgang Lutz, EUI Forum on Migration, 2016.

¹⁷⁷ For a more comprehensive list of demographic changes on an international scale, please refer to UN Department of Economic and Social Affairs, Population Division, 'Replacement Migration: Is It a Solution to Declining and Ageing Populations?' 2000, <http://www.un.org/esa/population/publications/migration/migration.htm>

Data availability and research gaps

Annex 2 provides detail of data collection at both EU and international level relating to demographic trends, ageing and migration. Studies from Commission DGs are also mentioned.

Full demographic data are not readily available on an international level, however the Population Division of the UN Department of Economic and Social Affairs does publish global population estimates and projections. Hypothetical population projections, however, are inherently uncertain and one of the main challenges is transmitting the meaning of uncertainty to lay audiences. Although different methods exist of depicting and measuring uncertainty, such as alternative scenarios and probabilistic models; even when choosing a central scenario as "best guess" for future trends, it is important to communicate that this is only one possible outcome, and any prediction of the future is uncertain. Smart policies should therefore anticipate multiple possible outcomes.

Another important data source comes from OECD reports¹⁷⁸. Data from non-OECD countries is much more difficult to retrieve due to weaknesses in institutional and organisation resources, as well as in infrastructure. Instead of data collection being done by authorities (the exception being border authorities), it is usually done by indirect actors, such as NGOs and civil society organisations.

Population data is not collected at EU level. Demographic data is collected by MS, which is sent to Eurostat for consolidation and to ensure that data is comparable. What is also missing is the territorial data at provincial level, which would be useful to study the migration impact at local level. In addition to this, a broader view on demographic trends which sees Europe as interconnected with other parts of the world (Africa and the Middle East) is necessary.

Approaches and solutions to overcome gaps and challenges

The complexity of the demographic challenge has been recognised by many leading organisations.¹⁷⁹ Demographic data is collected on a quantitative basis, and there has been little work done in analysing the meaning of trends from a more qualitative perspective. However, the question persists as to whether quantitative approaches alone can bring the desired future of sustainable human development? The answer perhaps lies in the 1994 Cairo International Conference on Population and Development (ICPD) and its Programme of Action, adopted by 179 Governments. It agreed that the well-being of individuals, rather than numerical population targets, should be the goal of the global population agenda. Therefore, a multi-disciplinary approach towards demography is necessary.

Social welfare, health, pensions, labour market and education policies are still very much shaped by current thinking and assumptions about the demographic challenges we are facing today, rather than what we will face in the future. Policy-thinking needs to be reshaped and conditioned to incorporate demographic trend analysis when planning for longer-term and

¹⁷⁸Such as the International Migration Outlook report, an annual publication that analyses recent developments in migration movements and policies in its countries; or the Society at a Glance report, a biennial report that provides internationally comparable data on demography and family characteristics, employment and wealth, mobility and housing, health status, social expenditure, subjective well-being, social cohesion, and other social measures.

¹⁷⁹ For example, by the International Institute for Applied Systems Analysis (IIASA), the Stockholm Resilience Center at the Stockholm University, the Earth Institute at Columbia University, the Sustainable Development Solutions Network (SDSN) and the Alpbach-Laxenburg Group, who have jointly launched the initiative "The World in 2050".

resilient policies, including that of migration policy. An EU population-migration centre, which provides projections on demography across the EU, looking into trends and expanding data to include employment and social indicators could be promoted in partnership with leading research centres (e.g. IIASA).

In terms of the data, a number of recommendations are made:

- Increase the quality of survey data on fertility and mortality, and improve the quantity and the quality of data available on migration both within countries and across national borders;
- Improve not just the methods of collecting data but also the access to it: there is ample room to improve access to information through partnerships with NGOs and researchers, and collaboration with governments;
- Combine a human capital approach with demographic data collection in order to shift the demographic debate to one that is beneficial rather than a threat;
- Use anticipation exercises that incorporate demographic trends (combining qualitative and quantitative analysis i.e. modelling and foresight exercises). DG JRC could play a valuable role in undertaking such analysis.

IV. Legal migration

c. Visa Policy

Policy and debate

A visa is the authorisation or decision of a MS required for transit or entry for an intended stay¹⁸⁰ in that MS or in several MS,¹⁸¹ while a resident permit is any authorisation valid for at least 3 months issued by the authorities of a MS allowing a third country national to stay legally on its territory¹⁸². Third country nationals who want to stay longer¹⁸³ than three months need to obtain a national long-stay visa and/or a resident permit / work permit, according to the legislation in that MS (EMN 2013).

The main objective of having a visa policy is to manage the trade-offs between facilitating cross-border movement on the one hand, and controlling such movement on the other. The visa policy is thus considered as a key government instrument to exercise selectivity on the mobility of people (Malmstrom 2014; EMN 2013) and an ‘influential instrument’ for a forward-looking policy on mobility.¹⁸⁴

Although, harmonisation of visa policies has been on the EU policy agenda since the early 1990s, this is actually turning out to be a difficult process, as individual MS face different national realities and have different interests. Both aspects of the EU visa policy (for short and long term visa) are being debated actively. The benefits of a liberal visa policy are usually associated with economic growth,¹⁸⁵ and thus visa restrictions may have a detrimental effect on the economy and for the individual, reducing the flow of travellers and therefore the benefits associated with the freedom of movement (Neumayer 2010). On the other hand, a too liberal visa policy may lead to a high increase of migration flows, which may negatively affect labour markets and public finances, incite social tension, or put national security at risk.¹⁸⁶

*Short term visa (Schengen visa)*¹⁸⁷

The European Agenda on Migration (the Agenda)¹⁸⁸ acknowledges that this visa policy needs to be modernised. Making travel easier for legitimate travellers should foster the EU’s attractiveness and increase demand for tourism, as well as cultural, educational and business services in the EU.

¹⁸⁰ With a short term visa the person is allowed to travel to any or all of the 25 Schengen area countries for a maximum of three months within a six-month period.

¹⁸¹ EMN Glossary.

¹⁸² Eurostat (2016) Residence permits statistics, http://ec.europa.eu/eurostat/statistics-explained/index.php/Residence_permits_statistics

¹⁸³ For circular migration and mobility partnerships, see the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 16 May 2007 on circular migration and mobility partnerships between the European Union and third countries (COM(2007) 248).

¹⁸⁴ COM 2011 Commission’s Communication on the Global Approach to Migration and Mobility (GAMM); The EU immigration portal provides practical information about immigration to the EU for third country citizens: http://ec.europa.eu/immigration/eu-immigration-portal-home_en.

¹⁸⁵ As highlighted in President Juncker’s ten priorities, <http://www.eesc.europa.eu/resources/docs/jean-claude-juncker---political-guidelines.pdf>

¹⁸⁶ European Commission, COM (2014) 165 final, ‘A smarter visa policy for economic growth’

¹⁸⁷ http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/visa-policy/index_en.htm

¹⁸⁸ A European Agenda on Migration, (COM(2015) 240 Final).

Some critical elements related to the Schengen visa are (Malmstrom 2014):

- Cumbersome, lengthy and costly visa procedures;
- No fast track procedure¹⁸⁹ for 'known' applicants, who have been granted a visa in the past (and not misused it), to go through an easier application process for family visits;
- Lack of a visa or another type of permit that allows travellers to stay more than 90 days in any 180-day period in the Schengen area;
- Differences across MS in the implementation of the Schengen visa.¹⁹⁰

Long term visa

The four main reasons for MS issuing long-term visas are: employment, education & training, family reunification and other reasons¹⁹¹ (Eurostat 2016). The main reason for first residence permits issued in the EU is for family reasons.¹⁹²

Coming to the EU as a highly-qualified worker can happen through the participation in programs, such as Horizon 2020 and the Blue Card.¹⁹³ As with the need to modernise the Schengen visa, the Commission acknowledged that the Blue Card was not as successful as hoped¹⁹⁴ due to many reasons, such as MS having preference over their own national schemes, or different attractiveness of the EU MS or deficiencies in transposing the Directive¹⁹⁵. These considerations have guided the draft of a new proposal that should be finalised by 2016.

In addition, one of the objectives of the EU in education is to promote Europe as a centre of excellence for studies¹⁹⁶. Generally, the international education and training programs are considerably more successful in attracting skills and talents from third countries than highly-skilled employment programs. Erasmus+¹⁹⁷, mentioned in the Agenda, is one of the EU programmes in these fields for the period 2014-2020 that includes a strong international dimension (European Commission 2016). The proposal on the Directive on Students and Researchers¹⁹⁸ aims to provide these groups new mobility and opportunities in the EU.

¹⁸⁹ E.g. waiving the requirement to lodge the application in person and to submit certain/all supporting documents.

¹⁹⁰ DG Migration and Home Affairs, having recognised this, set up a public consultation on improving procedures for obtaining short stay Schengen visas. http://ec.europa.eu/dgs/home-affairs/what-is-new/public-consultation/2013/consulting_0025_en.htm

¹⁹¹ Including stay without the right to work, international protection, etc...

¹⁹² 29.5% of total number of first residence permits in 2014 (Eurostat).

¹⁹³ http://ec.europa.eu/immigration/who-does-what/more-information/the-future-of-the-eu-migration-policy-general-context-and-new-initiatives_en;

http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/legal-migration/work/index_en.htm

¹⁹⁴ In the first two years after its introduction, only 16,000 Blue Cards were issued, which corresponds to 0.000067 of the EU labour force (240.2 million). Moreover, more than 80% of all Blue Cards (13,000) were issued by a single MS, Germany (European Commission 2015c, 15).

¹⁹⁵ Communication from the Commission to the European Parliament and the Council on the implementation of Directive 2009/50/EC on the conditions of entry and residence of third-country nationals for the purpose of highly qualified employment, COM(2014)287 final, 22.5.2014, Brussels.

¹⁹⁶ http://ec.europa.eu/immigration/who-does-what/more-information/the-future-of-the-eu-migration-policy-general-context-and-new-initiatives_en; http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/legal-migration/study-research-or-training/index_en.htm

¹⁹⁷ Regulation (EU) No 1288/2013 of the European Parliament and of the Council of 11 December 2013 establishing 'Erasmus+': the Union programme for education, training, youth and sport .

¹⁹⁸ Proposal for a Directive of the European Parliament and of the Council on the conditions of entry and residence of third-country nationals for the purposes of research, studies, pupil exchange, remunerated and unremunerated training, voluntary service and au pairing (Recast) COM(2013) 151 final,

The Agenda mentions the effect of a clear and well implemented framework for legal pathways to entrance by reducing push factors towards irregularity. Nonetheless it leaves little or no space for other type of employment rather than for highly-skilled individuals, not acknowledging the analysis done in 2004 regarding the link between the existence of legal migration entry channels and the increase of irregular migration¹⁹⁹.

In addition, the EU visa policy has a strong foreign policy dimension, reflecting and impacting on international relations. The Agenda does not mention the fact that visas actually play a role in EU sanctions against third countries. It has been argued that sometimes visas remain the EU's sole offensive instrument deployed in diplomacy.²⁰⁰

Data availability and research gaps

Annex 2 outlines where the data for each type of visa comes from.

Currently, the Schengen visa data collected by separate consulates are merged together and made available at the European level. However, there is no exchange of information between consulates meaning that before deciding upon a visa application, a MS "A" is not in consultation with MS "B" about reasons for a potentially declined visa by MS "B". Without a harmonised application of general legislative provisions, 'visa shopping' (i.e. the practice of making further visa applications to other EU States when a first application has been rejected),²⁰¹ and a different treatment of visa applicants in different MS cannot be prevented.

Also, information about Blue Card applicants and issuance are not shared among the MS²⁰², resulting in missing out on best practice and improvement of the system.

There is little or no systematically collected information about individuals from third countries with education and training visas issued for participation in programmes, such as, Erasmus+, after they have completed the education or training programme in the EU. This has implications since it is not understood how such programmes help in career development. It has also been highlighted that there is little information regarding definitive data on number of students who overstay their visas, as this was certainly the case for the UK (The Migration Observatory 2011).

In relation to visa sanctions, the criteria for their implementation and their impacts (political, social, economic, military, etc.) are largely unknown. By understanding their impacts, the EU could implement more targeted and efficient measures.

Approaches and solutions to overcome gaps and challenges

In terms of the Schengen visa, it is suggested that in order to manage at best the above mentioned trade-offs, the EU visa policy needs to be sufficiently liberal and selective at the

¹⁹⁹ Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Study on the links between legal and illegal migration. COM(2004) 412 final

²⁰⁰ Zaoitti, Ruben. 2014. "Escalating a 'visa war' with Russia could offer the EU an option to exert pressure over Ukraine" <http://blogs.lse.ac.uk/europpblog/2014/06/06/escalating-a-visa-war-with-russia-could-offer-the-eu-an-option-to-exert-pressure-over-ukraine/>

²⁰¹ http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/visa-information-system/index_en.htm

²⁰² Communication from the Commission to the European Parliament and the Council on the implementation of Directive 2009/50/EC on the conditions of entry and residence of third-country nationals for the purpose of highly qualified employment, COM(2014)287 final, 22.5.2014, Brussels.

same time. Currently, the criteria used for the assessing such benefits and risks are not systematically exchanged, harmonised, or made transparently available between MS. A more streamlined and disciplined approach would seem to be needed.

In order to appreciate the benefits to career development that an education and training permits can provide, data on this could be collected. Whilst such data cannot be captured through statistical sources (due to privacy issues), they could be collected on the basis of voluntary surveys, which perhaps DG JRC could be involved in.

As for the employment channel, success of a policy instrument depends amongst others on its implementation. For example, in order to identify the impacts of implemented visa sanctions, a study assessing them could be carried out by DG JRC. It would require the use of macroeconomic models. First, a baseline without visa sanctions would be simulated, then a policy scenario with visa sanctions would be constructed and implemented in the adopted model. By simulating a counterfactual scenario with visa sanctions and comparing it with the baseline trajectory, the true impact of visa sanctions (difference between the simulated baseline and the counterfactual scenario) will be identified.

IV. Legal migration

d. Effective integration

Policy and debate

Despite being constantly referred to when discussing the position of immigrants in the host societies, integration is understood both as a process and an end-result. Moreover, there is a wide range of opinions as to what roles should immigrants and host societies play in this process and who is responsible for the end-result. In academic debates, relations between integration and other less commonly-used concepts of assimilation, multiculturalism and super-diversity are far from being agreed upon (for a brief summary of these debates see King and Lulle 2016, 54–55; European Forum for Migration Studies 2006). For the purpose of the following discussion, integration is understood as a process of becoming an equal part of society.

Integration is a multidimensional process. It is most often measured through labour market, political, educational and housing outcomes of immigrants. However, there is now an understanding that other dimensions such as cultural integration, social capital (in a sense of trust and the quality of social relations) and self-identification of immigrants are also crucial for understanding its dynamic and its interconnected nature. For example, failure in one field such as housing or education can jeopardise progress in others. Moreover, in recent decades there has been more scholarly and political interest in the so-called second generation immigrants (Eurostat 2011a), especially as little internationally comparable statistical material has been gathered on the second generation.²⁰³

In addition, temporal aspects of integration are crucial. In other words, it takes a long time for integration as an end-result to demonstrate itself and it takes different amounts of time for immigrants with different starting points (they migrate for reasons such as international protection, family, work or study) (Eurostat 2011a). The challenge for assessing integration outcomes in Europe as a whole is to take into account both the diverging conditions for integration in different MS and the diversity of the immigrant population.

Although there is a common belief that too many immigrants cannot be effectively integrated, existing data analysed by the OECD shows that integration challenges do not necessarily increase with the share of immigrants in the population (OECD and European Union 2015). Nonetheless, the level of acceptance of immigration by the general public is susceptible to dramatic shifts in response to media events. However, attitudes toward immigrants vary throughout Europe and differ substantially depending on the socio-economic background of the immigrant and of the native person. For example, Europeans with tertiary education, who are younger and employed, showed more positive views towards migration (IOM 2015a; OECD and European Union 2015).

One of the most studied aspects of migrant's integration is related to their inclusion in the labour market. It appears that migrants are more likely to have a lower employment rate than their native-born counterparts (Eurostat 2011a; King and Lulle 2016; OECD and European Union 2015). Better-educated, third-country nationals in the EU have greater difficulty finding a job than both their EU peers and other lower-skilled immigrants. They are 50% more likely to be overqualified for the job they are doing than the host-country nationals (Eurostat 2011a;

²⁰³ As noted by the project, 'The Integration of the European Second Generation' <http://www.tiesproject.eu/index9ed2.html?lang=en>

OECD and European Union 2015). This contrasts with immigrants' overall higher employment rates in OECD countries as a whole (OECD and European Union 2015), implying that conditions in Europe may be particularly difficult for migrants' labour market integration. This is heightened by problems with recognising foreign qualifications, leading to unequal treatment in the labour market (Heddleston, Niessen, and Tjaden 2013). However, there is an agreement that over time, labour market outcomes of immigrants converge with that of the native-born (Eurostat 2011a).

When it comes to the European Agenda on Migration (the Agenda)²⁰⁴, it appears that the discussion on integration is quite limited because integration policies are primarily within the competence of MS. The Agenda mostly consists of financial and other forms of support to national governments, local authorities and civil society. Nevertheless, the Commission at the end of 2015 launched an internal Inter-service Group on the integration of third country nationals, and is planning a related Communication in the second quarter of 2016.²⁰⁵ Concerning healthcare services, there has been criticism of the Common European Asylum System (CEAS)²⁰⁶ and how different levels of its implementation have left gaps in access to healthcare for asylum seekers.²⁰⁷

Data availability and research gaps

Measuring migration integration

In general, migrant integration can be measured in terms of labour market participation; education; political participation; access to citizenship; family reunification; health and the level of experienced discrimination²⁰⁸. More description on the databases can be found in Annex 2. Eurostat annually monitors the results of integration policies in the areas of employment, education, social inclusion and active citizenship, known as the EU Zaragoza indicators²⁰⁹, drawing on surveys such as the EU Labour Force Survey (EU LFS)²¹⁰ and the EU Survey on Income and Living Conditions (EU SILC)²¹¹. However, there are limitations to the statistics collected by Eurostat because of the survey data. Both the EU-LFS and EU-SILC target the whole resident population and not specifically migrants. Issues concerning coverage of survey data arise in the following cases.²¹²

²⁰⁴ A European Agenda on Migration, (COM(2015) 240 Final).

²⁰⁵ The European Agenda for the Integration of third-country nationals was published in 2011: COM (2011) 455 final. This initiative builds upon the 2011 one.

²⁰⁶ CEAS is discussed in Chapter III.a.

²⁰⁷ These were highlighted by health experts in the session, 'Health and Migration' at the European Commission DG Research and Innovation's recent conference, Understanding and Tackling the Migration Challenge: The Role of Research, 4 – 5th February 2016 <http://ec.europa.eu/research/conferences/2016/migration-challenge/index.cfm>

²⁰⁸ Migrant Integration Policy Index <http://www.mipex.eu/>

²⁰⁹ The Zaragoza Declaration was approved at the informal Justice and Home Affairs Council in June 2010, which called upon the Commission to undertake a pilot project to examine the indicators, to analyse the significance of the defined indicators taking into account the national contexts, the background of diverse migrant populations and the different migration and integration policies of MSs and to report on the availability and quality of the data from agreed harmonised sources necessary for the calculation of the indicators.

²¹⁰ <http://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>

²¹¹ <http://ec.europa.eu/eurostat/web/income-and-living-conditions/overview>

²¹² http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics_-_overview#Data_sources:_advantages_and_limitations

- **Recently arrived migrants:** They are missing from the sample in every host country, resulting in under-coverage of the actual migrant population in the EU-LFS and EU-SILC;
- **Collective households²¹³:** the EU-SILC only covers private households. Persons living in collective households and in institutions for asylum seekers and migrant workers are excluded from the target population. This also results in under-coverage of migrants in the survey;
- **Response from migrant population:** a significant disadvantage of the surveys is that a high percentage of the migrant population do not respond to them. This may be due to language difficulties, misunderstanding of the purpose of each survey, difficulty in communicating with an interviewer, and/or fear of a possible negative impact on their right to remain in the country after participating in them.
- **Sample size:** given the nature of the EU-LFS and EU-SILC as sample surveys, these cannot fully capture the characteristics of migrants in EU MS with very low migrant populations.
- **Information on country of citizenship and country of birth:** this information is asked from all persons in private households sampled in the EU-LFS, whilst in the EU-SILC, this information is collected only for those aged 16 and over, resulting in an under-estimation of the number of migrants by country of citizenship and country of birth.

Employment

Proper evaluation of the convergence process depicted above is difficult due to the lack of longitudinal data to support this opinion, since very few employment surveys use representative samples of immigrants over long periods of time (OECD and European Union 2015).

Ethnic entrepreneurs are a potentially significant group for which Europe-wide comparative data is missing. Entrepreneurial opportunities are important for integration, job creation and social cohesion (European Foundation for the Improvement of Living and Working Conditions 2015). However, company registers seldom provide data on entrepreneurs' nationality, and even more rarely on their country of birth. It is therefore impossible to assess the scale of the sector and to compare the creation of new business from country to country (OECD and European Union 2015).

Education and social inclusion

The discussion below will highlight more explicitly the general insufficient information on migrants' use of public services. Generally speaking, there is little information about the impact of immigration on the use of public services (especially about the value of migrants' contributions to the provision of public services and costs), which includes also fiscal effects of immigration (The Migration Observatory 2011). It must be noted, however, that the references here concern the UK mainly, demonstrating the limited amount of information available in this area.

i) Housing

²¹³ Collective households or institutional households (as opposed to private households) are, for instance: hospitals, old people's homes, residential homes, prisons, military barracks, religious institutions, boarding houses and workers' hostels (Eurostat Statistics Explained).

Little has been done on the ways immigration directly and indirectly impacts house prices, rents, and social housing at national and local levels (The Migration Observatory 2011).

ii) Education

Concerning higher education, there is a lack of data on the number of migrant students; those who have over-stayed, their contribution to net-migration over the long term, and the impact of foreign students on the higher education sector and labour market (The Migration Observatory 2011); As for primary and secondary school, there is insufficient cross-country, comparable information about the impact of immigration on the use and provision of school services and very limited information on the number of migrants' children in schools. This is because enrolment data does not often record nationality, country of birth, or immigration status (The Migration Observatory 2011).

Although cognitive skills are measured in the OECD's Programme for International Assessment of Adult Competencies (PIAAC)²¹⁴, no information about non-cognitive competencies like the ability to interact and communicate with others, or to persevere when performing different tasks, is available (OECD and European Union 2015).

iii) Health

The FRA report (FRA, 2013) notes that data on ethnicity is hardly collected systematically in national surveys or their samples are not large enough to allow for the further break down of data. If one looks at more international data, such as the latest OECD report which highlights migrants' access to services (OECD and European Union 2015), there are some limitations, such as the surveys about medical treatment at national level are small; information is of limited validity, there is no information available about refugees health status or emergency cases.

Other data challenges,²¹⁵ have been identified as: the importance to focus on the health needs of the full length of the migration trajectory (immediate, medium and long-term needs); to look at patterns of health in countries of origin; to undertake epidemiological field work, as well as participatory research and scenarios in order to plan the (changing) health care system due to migration. Finally more research is needed in what the implications of migration will be on EU health care systems and its cost.

iv) Active citizenship

Active citizenship, meaning civic and political participation, is one of the indicators measuring effective integration. However, reliable and comparable data on this indicator is scarce, in part because this is quite difficult to measure for migrants especially until the moment they acquire political rights. There does not appear to be any database or survey which properly collects information about this. Eurostat only reports data on the number of persons who acquired citizenship and the number of resident third-country nationals (Eurostat 2011b). The European Social Survey (ESS)²¹⁶ could provide a potential data source but this survey is not designed to measure such an indicator among immigrants.

²¹⁴ See Annex for further information.

²¹⁵ These were highlighted by health experts in the session, 'Health and Migration' at the European Commission DG Research and Innovation's recent conference, Understanding and Tackling the Migration Challenge: The Role of Research, 4–5th February 2016 <http://ec.europa.eu/research/conferences/2016/migration-challenge/index.cfm>

²¹⁶ <http://www.europeansocialsurvey.org/>

However, information about the ways in which young people are prepared to undertake their roles as citizens, as well as about students' knowledge and understanding of concepts and issues related to citizenship, for both immigrant and native students are provided by the IEA International Civic and Citizenship Study (ICCS).²¹⁷ Nevertheless, the migrant sample tends to be small.

Approaches and solutions to overcome gaps and challenges

Measuring integration and best practice

Some recommendations with respect to data sources (Heddlestone et al 2013) include increasing sample sizes in all the surveys which measure integration: European Union Labour Force Survey (EU-LFS), European Union Survey on Income and Living Conditions (EU-SILC), OECD surveys such as Programme for International Student Assessment (PISA)²¹⁸, Survey of Adult Skills (PIAAC),²¹⁹ European Social Survey (ESS),²²⁰ and showing uncertainty while presenting estimates based on sample surveys (e.g. confidence intervals).

As stated at the beginning of this section, integration is a process of becoming an equal part in society. For this to succeed, accommodation of both immigrants and host societies is required and it needs to be acknowledged that the receiving society has much more power over this process (European Forum for Migration Studies 2006). The funding from the European Commission as mentioned in the Agenda can play a big role.

More specifically, there are already a number of platforms where best integration practices are being shared (e.g. the European Migration Network, the European website on Integration (EWSI)²²¹ or Migrant Integration Policy Index²²²) and MS could take stock from these. Financial support to MS to improve integration could be enhanced by the rigorous and systematic assessment of the impacts and effectiveness of various integration measures and integration actors across the EU.

Although numerous studies have emphasised the high integration potential from migrants organising themselves (European Foundation for the Improvement of Living and Working Conditions 2015), the integration programmes in the EU are still largely run based on an asymmetric model of representatives of the host society providing assistance to immigrants. As flows of immigrants are likely to grow in the near future, more could be done in terms of engaging the industry and the private sector in the integration process.

Access to services

A proposed approach to assess the impact of immigration on the use of public services, is to use longitudinal data where repeated measures of the same participants are needed. More information could be gained from cross-sectional studies. However, both the challenges and feasibility of using cross-sectional and longitudinal surveys have to be considered (see Chapter IV.a).

²¹⁷ <http://iccs.iea.nl/>

²¹⁸ <http://www.oecd.org/pisa/>

²¹⁹ <http://www.oecd.org/site/piaac/>

²²⁰ <http://www.europeansocialsurvey.org/>

²²¹ <https://ec.europa.eu/migrant-integration/home>

²²² <http://www.mipex.eu/>

IOM²²³ has recently carried out a review on data collection mechanisms and referral systems along the different phases of the reception process in the southern EU MS, including in open/closed centres and border facilities, highlighting the need for standardised health assessments and statistics both between countries and within the same country. In addition, it is conducting a thematic study on the cost analysis of non-provision of healthcare to migrants aimed at covering a lack of information related to the impact of migrants in accessing national health assistance.

With regards to health, it is noted that DG SANTE is trying to address the challenges highlighted in (iii) with a recent call on migration and health.²²⁴ The aim of the call is not to provide direct healthcare to incoming refugees and migrants, but rather to support MS activities in the provision of health care, in particular at the hotspots where refugees and other migrants are registered.

From the DG JRC perspective, it could help set up a European network of national public health authorities for the standardised collection, analysis, and synthesis of information and data of refugee and immigrant health at the European level as well as create partnerships (with IOM for example) to promote further analysis on the integration of migrants in the social systems and the subsequent impact.

²²³ <http://equi-health.eea.iom.int/>.

²²⁴ http://ec.europa.eu/health/programme/events/ev_20151030_en.htm

IV. Legal migration

e. Maximising the development benefits of countries of origin

Policy and debate

The migration-development nexus is not always an easy relationship: "*Understanding the migration-development nexus is bedevilled both by conflicting empirical advice and by competing theoretical and ideological positions,*" (King and Lulle 2016, 93). The positive and negative views regarding this nexus since the 1960s are: the brain gain for receiving countries, brain-drain for sending ones; filling skills shortages in receiving countries, yet also driving down wages and taking jobs from the local population; remittances helping develop receiving countries.

It is only recently that migration has been formally recognised as positively contributing to development. Indeed, the 'migration-development nexus' only gained popularity in 2000 (King and Lulle 2016). It is now generally accepted that migration and development have a symbiotic relationship where migration is seen, first, as a developmental tool, whereby tackling “root causes” of migration such as poverty and unemployment can prevent migration at the source; and secondly, migration networks and diasporas that provide remittances and a transfer of skills and knowledge can also be positive factors in advancing development.²²⁵

The key topics in the migration – development nexus that have driven the debate as of 2005 are the Global Approach to Migration and Mobility (GAMM), the Sustainable Development Goals (SDGs) and remittances.

Global Approach to Migration and Mobility (e.g. mobility partnerships, readmission agreements)

Since 2005, the GAMM acts as the overarching framework of the EU external migration and asylum policy.²²⁶ GAMM's agenda has four objectives: to better organise legal migration, and foster well-managed mobility; to prevent and combat irregular migration, and eradicate trafficking in human beings; to maximise the development impact of migration and mobility; and finally, to promote international protection, and enhance the external dimension of asylum.

In an attempt to take a more managed and global approach to migration, the EU has proposed dialogues and negotiated mobility partnerships with migrant-sending countries since 2008. Some of the elements related to development are the support of voluntary return, sustainable reintegration of returning migrants or a tailored circular migration scheme. Mobility partnerships aim to address this issue, but have been faced with several challenges such as the lack of uniformity in implementation and full MS participation.²²⁷ Overall, migrant-sending countries often have different views than the EU as to what the root causes of migration might be and what the developmental needs are.

²²⁵ The recent JRC Technical 2015 Report on '*The EU Blue Card: Managing Migration Challenges and Opportunities for Developing Countries*' analyses channels of maximising the development in countries of origin such as the transfer of knowledge from receiving to sending countries, JRC94323, EUR 27080 EN

²²⁶ http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/international-affairs/global-approach-to-migration/index_en.htm

²²⁷ European Commission, Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Report on the implementation of the Global Approach to Migration and Mobility 2012-2013', http://ec.europa.eu/dgs/home-affairs/e-library/documents/policies/international-affairs/general/docs/gamm_implementation_report_2012_2013_en.pdf

Sustainable Development Goals (SDGs)

The 2030 Agenda on SDGs²²⁸ includes migration for the first time in a global development framework, where migration is mentioned in 7 targets: student mobility, trafficking, workers' rights, managed migration policies, resilience to shocks, disaster risk and management, and data disaggregation. Implementing and monitoring the new Agenda will be challenging, partly because of its universality: it applies to all countries at all levels of development. Both the quantitative and qualitative data on indicators and targets are currently being developed (each country chooses the indicators best suited to them to track its achievement of sustainable development). Therefore, success will require international coordination and collaboration, which in turn requires accountability and monitoring at the international level (de la Mothe, Espey, and Schmidt-Traub 2015).

Remittances

Remittances are private transfers from the migrant who is considered a resident of a host country to recipients in the migrant's country of origin (The World Bank 2011). Remittances have been traditionally associated with financial transfers but they can also be in the form of goods (consumer products, medicines). Within the last couple of decades, social remittances have become the subject of research (Levitt 1998), and they are defined as ideas, values, beliefs; intra-family responsibility; principles of age and gender equality; and community participation.

Remittance flows could improve access to wider financial services for migrants and remittance recipients; however the link between these two is in need of being strengthened. Remittances are sometimes expensive to send back, thus removing legal barriers and cost barriers to sending remittance could significantly reinforce the impact that these flows have on development in countries of origin. One of the targets of the SDGs is reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%, by 2030.²²⁹ The European Agenda on Migration (the Agenda)²³⁰ makes it a priority to facilitate cheaper, faster and safer remittance transfers.

In general, the Agenda recognises a need for *"enhanced coherence between different policy sectors, such as development cooperation, trade, employment, foreign and home affairs policies,"*²³¹ and the fact that the EU must *"continue engaging beyond its borders and strengthen cooperation with its global partners, address root causes, and promote modalities of legal migration that foster circular growth and development in the countries of origin and destination"*²³².

The Agenda, however, does not specifically take into account how the relationship between migration and development functions, and how demographic and socio-economic changes in developing countries could reinforce migration pressures. For example, contrary to assumption, economic development in sending countries can result in more migration in the short-term, a.k.a. the migration hump model (inversed U shape) (King and Lulle 2016).²³³

²²⁸ To see how migration is reflected in the SDGs, please visit <https://unobserver.iom.int/2030-agenda-sustainable-development>

²²⁹ As noted in the OECD Expert Meeting, 'Perspectives on Global Development 2016: International migration in a shifting world', <http://www.oecd.org/dev/migration-development/pgd-expert-meeting.htm>

²³⁰ A European Agenda on Migration.,(COM(2015) 240 Final).

²³¹ Ibid p.6.

²³² Ibid, p. 7

²³³ Further research on this has been done by Martin and Taylor (1996), de Haas (2007), Telli (2014).

Therefore, since people require resources to migrate, developmental policies can actually enable people to migrate, and this clearly has important policy implications.

In addition, the Agenda is focused mainly on high-skilled migrants when it comes to harnessing development potential of migration (i.e. the overhaul of the Blue Card scheme). However, the impact and needs for low- and medium- skilled workers needs further analysis and should be better integrated into the Agenda.

Consequently, the challenge is to identify the actions and policies that are needed both in countries of origin and destination in order to fully harness the development potential that migration brings.²³⁴ The importance of non-migration policies should not be downplayed (given the fact that some of the most important factors in migration flows do not deal with migration *per se*) nor should policy coherence for development. Moreover, how to adapt policies to fit local realities, rather than a one-size-fits-all approach could be further explored.

Data availability and research gaps

The major players in this arena include the Centre for Global Development (CDG) and the OECD, of which more information can be found in Annex 2. In October 2016, the OECD is expected to release a report, 'Perspectives on Global Development 2016: International Migration in a Shifting World', in which new data will be released, as well as a scenario-based foresight exercise considering future migration scenarios.²³⁵ Furthermore, Annex 2 notes interesting initiatives from the IOM to monitor newly adopted SDGs.²³⁶

Linked to the remark that migration policies should not have a one-size-fits-all approach, there is a need for more research on different categories of countries of origin, which would serve to develop more tailored approaches, especially given that countries of origin are becoming more diverse whereas the destination countries are more concentrated. Despite this, policies in both origin and destination countries (i.e. social protection, linguistic, integration in civil, cultural and economic fields) could also be studied more carefully.

Remittances

Annex 2 provides examples of the datasets used to record remittances, although data collection on remittances, both in countries of origin and destination shows gaps. This is due mainly to the fact that remittances are not necessarily sent through official channels, thus making official recording in both origin and destination countries difficult (Gammeltoft 2003; Carling 2008; The World Bank 2011; King and Lulle 2016). Therefore data currently produced on remittances underestimates total flows. It is also difficult to analyse just how remittances are being spent once they reach the countries of origin, whether for investments, day-to-day expenditures, education, etc.

It is important to stress that a significant proportion of the remittances are in-kind and immaterial, yet they have an immense indirect effect not only on the economy but on the social and political sectors of the country of origin, which is a research area that remains unexplored. Therefore policies should not only aim at reducing the cost and stimulating money transfer, but also foster real drivers of development such as knowledge and skills transfer.

²³⁴ Research is being done by the OECD on this topic, <http://www.oecd.org/dev/migration-development/ippmd.htm#About2> and see Annex 2.

²³⁵ <http://www.oecd.org/dev/migration-development/pgd-expert-meeting.htm>

²³⁶ Further information can also be found here <https://unobserver.iom.int/2030-agenda-sustainable-development>

Approaches and solutions to overcome gaps and challenges

Countries of origin differ (as to destination ones) and therefore tailor made responses are necessary. Furthermore, economic prosperity of the sending country can lead to more migration and therefore this needs to be taken into account as well. As for the GAMM, although extremely beneficial, better coordination and involvement between MS, partner countries and EU delegations is needed for improved implementation.

Few projects are currently in place to better analyse the link between migration and development. The OECD is currently developing one project that aims to provide empirical evidence on the interrelations between public policy, migration and development²³⁷ and another one that seeks to understand how immigration affects the economies of a number of low-income and middle-income countries.²³⁸ IOM is working on a Migration Governance Index with the Economist Intelligence unit with the end goal of measuring the degree to which national policies facilitate and promote responsible, safe and regular migration of people, as per the sustainable development goals (SDGs). It will serve both as an evaluating mechanism and as a tool for countries, particularly in migration capacities development and policy framework and implementation.²³⁹

Furthermore, more creative and innovative policy developments are needed that move beyond remittance flows and circular migration schemes as a means to 'manage' migration, and which consider both low and high-skilled migration, i.e. potential global skills partnerships. In addition, modelling could be used to research migration pressures linked to labour market needs.

Regarding data on remittances, King and Lulle (2016) suggest that collecting primary data on remittances through sample surveys could provide more accurate data as they give information about who sends, who receives, and what the money is used for. The downside is that they would only capture a very small part of total global transfer and respondents may not give accurate responses. They also recommend direct surveys.

With regards to DG JRC, there are a number of initiatives which could be of particular interest. For example, the tool being developed by the Global Knowledge Partnership on Migration and Development (KNOMAD)²⁴⁰ to measure policy and institutional coherence for migration and development (PICMD), could be something to which the DG JRC could contribute to.

DG JRC could also assist in developing and monitoring the indicators for the SDGs, in cooperation with DG DEVCO, DG HOME and the IOM. DG JRC is currently doing some work packages on SDGs, giving specific focus to climate change and environment as drivers for migration.

DG JRC could also contribute to the research gaps regarding remittances, whether in providing more sample surveys, or looking into the aspects of social remittances.

²³⁷ <http://www.oecd.org/dev/migration-development/ippmd.htm>

²³⁸ http://www.ilo.org/global/topics/labour-migration/projects/WCMS_344706/lang--en/index.htm
<http://www.oecd.org/dev/migration-development/eclm.htm>

²³⁹ <http://iomgmdac.org/migration-governance-index/>

²⁴⁰ See Annex 2 for more detail.

IV. Legal migration

f. Additional: The economic effects of migration

Policy and debate

At the international and the EU level, there are several initiatives and declarations that provide the framework for defining the priorities of economic migration. For example, the UN General Assembly High-level Dialogue on International Migration and Development recognised both the contribution migration makes towards achieving sustainable development, and to countries of origin, transit and destination (United Nations 2013). From the EU perspective, President Jean Claude Juncker, has made attracting talent from third countries one of the European Commission's priorities.²⁴¹

Currently, what is troubling both policy and academic debate is the socio-economic impacts of the mass migration from Syria into the EU. The debate centres on the uncertainty surrounding the potential social, macroeconomic and budgetary implications²⁴²: how many will come? How long will they stay? How much do they cost?

Only a few studies have attempted to quantify the potential macroeconomic effects of the continuing mass migration flow into the EU. Aiyar et al (2016) recognise that EU GDP gains from the refugee influx may be modest in the short-term, as little as 0.13% by 2017. In the medium to long-term however, the GDP growth could be considerably more substantial, 0.25% by 2020, although this is conditional on the successful integration of migrants into the EU labour markets. OECD studies tend to show that migration has a positive effect on the economy: (i) immigrants have a broadly neutral fiscal impact in the OECD countries (rarely exceeding 0.5% of GDP); (ii) migrants account for the greatest share of the workforce increase; (iii) migrants usually supply labour to fill important niche markets both in fast-growing and declining sectors of the economy; (iv) the proportion of the highly educated migrants is rising in the OECD countries; (v) migrants make important contributions to the receiving countries' economy as they bring skills and abilities and enhance human capital; and (vi) migrants significantly enhance the labour-market flexibility, notably in the EU (OECD 2013; OECD 2014a; OECD 2014b).

However, the latest policy briefs stress that the economic effects of the refugee inflow are often driven by ill-informed perceptions, which can lead to public antagonism and public policy in jeopardy (OECD 2014b). Constant (2014, 1) argues that "[n]either public opinion nor evidence-based research supports the claim of some politicians and the media that immigrants take the jobs of native-born workers". The study also shows that immigrants of all skill levels do not significantly affect native employment in the short-term, but boost employment in the long-term.

The general conclusion to make – dependent on good labour integration²⁴³ – is that whilst the net fiscal impact of immigration is likely to be negative in the short-term, the long-term economic gains varies from small (Boubtane, Dumont, and Rault 2014) to substantial (IMF

²⁴¹ <http://www.eesc.europa.eu/resources/docs/jean-claude-juncker---political-guidelines.pdf>

²⁴² According to the 2015 Eurobarometer survey (European Commission 2015a), the increasing inflow of refugees is among the most important concerns of EU citizens overtaking issues such as the economic situation, unemployment or public finances.

²⁴³ The IMF notes the importance of sound labour market integration policies on the positive contribution of migrants (IMF 2015).

2015). This highlights the uncertainty surrounding migration: that it can be beneficial for the economy, but the extent can vary.

Nevertheless, it must be acknowledged that the sizeable influx of migrants into the EU may have adverse economic impacts on the EU labour markets, particularly for small countries and for lower-skilled sectors. Such effects of the impacts need to be identified and a unified strategy needs to be developed as to how to address them. At the moment however, a unified response from the EU to the mass inflow of refugees is difficult to achieve.

Yet, one has to also bear in mind the economy on refugees. Findings by Koehler et al. (2010) suggest that the economic crisis led to the deterioration of employment prospects for migrant workers more significantly than for the local population. Furthermore, it increased the inter-sectorial mobility amongst migrant workers; as well as caused more migrants to receive welfare benefits than the local population, which was in the reverse before the crisis.

The European Agenda on Migration (the Agenda)²⁴⁴ is yet to consider the effects of the mass influx of migrants on the economy, rather it looks at how to develop benefits for countries of origin, which was discussed in the Chapter IV.e. Furthermore, since the Agenda does not cover migration as temporary, circular, seasonal or unpredictable, nor initiatives such as the facilitation of temporarily migration to support industries facing labour shortages (e.g. agriculture, construction).

Data availability and research gaps

Data collected in this area is noted in Annex 2.

The European Labour Force survey (EU-LFS) and the European Union Survey on Income and Living conditions (EU-SILC) are used to study various economic effect of migrants' labour market participation;²⁴⁵ data provided by United Kingdom Household Panel, the German Socio-Economic Panel (SOEP) or the European Community Household Panel (ECHP), has also assisted academics in studying the socio-economic conditions of migrants.²⁴⁶

In addition, the other data sources (mostly at national level)²⁴⁷ are collected and employed in the academic and policy literature to study various issues of migration, some of which are mentioned in Annex 2.²⁴⁸

According to the ILO²⁴⁹, comprehensive, comparable and reliable statistics or estimates of the economically active migrant population are largely unavailable, while data on the short-term migrant are even more difficult to capture. The availability of the migration data disaggregated by socio-economic characteristics (e.g. age, sex, occupation, skills, working conditions, wages) remain very fragmented and unreliable at the national, regional and international levels. Furthermore, there is poor socio-economic data available in support of emerging policy issues, such as that of the current mass influx of refugees. This is often because the data collected for

²⁴⁴ A European Agenda on Migration, (COM(2015) 240 Final).

²⁴⁵ See for example Dustmann, Fabbri, and Preston (2005), Kraler and Reichel (2010), Font and Mendez (2013).

²⁴⁶ See for example Büchel and Frick (2005) and Jaeger et al. (2010).

²⁴⁷ See for example the Longitudinal Survey of the Integration of First-Time Arrivals for France (<http://www.immigration.interieur.gouv.fr/Info-ressources/Statistiques/Etudes-et-publications/Etudes/Enquete-Longitudinale-sur-l-Integration-des-Primo-Arrivants-ELIPA>) or the TIES project which collects data through surveys to study the socio-economic integration of descendants of immigrants from Turkey, ex-Yugoslavia and Morocco in fifteen cities across eight EU countries (<http://www.tiesproject.eu/>)

²⁴⁸ For example, ELIPA, MAFE, TIES.

²⁴⁹ <http://www.ilo.org/global/topics/labour-migration/policy-areas/statistics/lang--en/index.htm>

such issues is done on an ad-hoc basis, linked to the research interest of the particular network, institution or policy question.

The study of Boubtane, Dumont and Rault (2014) suggests that even official country-level data from the OECD International Migration Database and the UN International Migration Flows Database are not readily available to be employed for economic cross-country impact analysis, as they are not harmonised and are not comparable across countries. As a result of which Boubtane, Dumont and Rault (2014) have made a substantial effort to collect and produce a comparable data for the 22 OECD countries included in their study.

In conclusion, the main constraint for analysing the economic impacts of migration is the limited availability of consistent, harmonised and reliable socio-economic data specifically on migrants.

Approaches and solutions to overcome gaps and challenges

In response to the gaps around data availability and collection, these could be filled in several ways by:

- Promoting the collection and harmonisation of economic data on migration and making them available through official sources (Eurostat 2014);
- Supporting the collection of longitudinal micro-economic data on migration across the EU to address gaps in data consistency and availability, in order to monitor and evaluate the impacts of migration in a wider socio-economic context;
- Collecting targeted economic data on an ad-hoc basis in order to provide a swift response to the emerging policy issues on migration.

In order to contribute to reducing the uncertainties around the recent flows, DG JRC could help identify the socio-economic impacts of the current refugee influx by performing targeted surveys of refugees, with the aim of establishing their education, qualifications, work experience, etc..

There is also the potential to improve the understanding of the economic impacts of migration. The EU migration policy could benefit from previous work in the following directions:

- Using an agent-based approach to study the behaviour of migrants at the individual level, and impacts of migration policies on the EU economy (e.g. fiscal effects); see, for example, application of the EUROMOD model in Aiyar et al. (2016) to study the macroeconomic effects of refugee influx;
- Using a general equilibrium model to study the potential economy-wide impacts of migration and migration policies on the EU economy (e.g. GDP growth, labour integration policies); see, for example, application of the RHOMOLO model in Ciaian and Kancs (2016) to study the labour market mobility and labour market integration;
- Using statistical and econometric methods to exploit available micro (longitudinal or cross-sectional) and macro (cross-country time series) data for quantifying the economic effects of migration policies; see, for example, Boubtane, Dumont and Rault (2014), who employ econometric estimations at the country-level panel data for 22 OECD countries, to study the migrants' human capital impact on economic growth.

Finally, the expected social, macroeconomic and budgetary impacts of the current refugee influx in the EU could be evaluated in a DG JRC study. This could be carried out by simulating a counterfactual scenario with refugee simulation compared to a baseline trajectory (no migration).

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Annexes

Annex I: Table summary of challenges and gaps; approaches and solutions

Pillar I	Policy challenges	Research gaps	Approaches and solutions
Irregular migrants	Conflation of what a migrant is: mixed flows and motivations; no reliable statistics for over-stayers, secondary flows of asylum seekers	Difficult to quantify data in consistent, comparable manner – not officially recorded coherently; Data: partial coverage from different sources; Difficulties of having reliable and updated data; More evidence needed on migration routes external & in EU, push factors, decision making, role of social media; strengthening identification	Enhance cooperation between Frontex, Europol, IOM, ICMD to improve knowledge on irregular migration. Research partnerships to expand evidence base on irregular migration.
Root causes : Environment	More internal movement from rural to urban, extreme weather conditions to be factored in	Cannot make causative link between migration and environment; Studies use diverse approaches, climate projections have much uncertainty, limited amount of data in developing countries	Holistic approach: take into account human security, economic development. JRC competences - Global Climate Change Alliance, multi-risk early warning systems for severe weather, Atlas of Water Cooperation and Conflicts. “Best data sets”- blending official data with remote sensing, research on impact of climate change on environmental degradation and socio-economic impacts. Comparative research- identify common characteristics for different types of displacement strategies.
Conflicts	Threats to personal integrity is an important driver	Difficult to collect data on IDPs, comparability (data from multiple stakeholders), inadequate models (don't capture enough factors), practical obstacles.	Identify factors other than threat of violence; examine levels of violence that drives migration. JRC developed indices on conflict & risk. EU migration index looking at root causes in a quantitative manner.

Economy	Economic factors aren't necessarily predominant driver of migration, well-being to be considered.	Labour market models do not capture social behaviour and individual choices.	Holistic approach in examining migration determinants.
Smuggling and Human Trafficking	Conflation of trafficking and smuggling, both are lucrative businesses. Identify + protect witnesses, increase prosecution, increase coordination between key actors.	Precise data difficult due to its nature. Under reporting of victims, unstandardised data collection – hampering comparability.	More research needed on smuggling/trafficking corridors and the money flow. Data transparency and central coordination. Capacity building on data collection and victim identification. Fuller methodology: understanding contextual setting, study demand side, longitudinal surveys to investigate individual circumstances. ILO could play a role in harmonising modern slavery data collection world-wide. JRC competence – could support in the analyse of social media (Frontex media monitoring), websites used by smugglers; composite index integrating statistical and qualitative data; identification of falsified documents, anomalies detection; technologies for detecting and identifying trafficked vessels.
Return	Migration is complex- pendular, circular, temporary, liquid; long-term reintegration of returnees; harmonise Return Directive; coordination between actors involved in return ops (EURINT, Frontex, ERIN, EURLO); alternatives to detention.	Improved stats on return; inconsistencies in data supplied from various sources. Little internationally comparable data on return – different definitions of migrant; data collected differently, national authorities collect better info on entering than leaving, MS not systematic in entering entry bans into SIS, not familiar with collecting return info via VIS.	More integration between IT systems so that data can be captured and shared; continuous training to MS in effectively recording return info and entry bans into these systems. Improve flow of information in return operations between actors

Pillar II	Policy	Research	Approaches and solutions
Border management	Frontex mandate, Smart Borders package – looking at biometric identifiers.	How to obtain biometric data – privacy and integrity concerns. Little data on departure, no systematic check that visa holders have left once visa has expired.	Systematic info exchange and full exploitation of security concepts can help control the border effectively. More accurate ‘test data’ to test the effectiveness of IT systems and achieve better deployment of systems. JRC’s competences: expertise in biometric identifiers (including of children) can assist with improving IT systems.
Pillar III	Policy	Research	Approaches and solutions
CEAS	Difficulties in harmonisation and proper implementation across MS; negative public opinion of asylum seekers; reform of Dublin; asymmetries re reception, recognition and integration across MS, the role of private sector in relocation & resettlement.	Hard to distinguish data between asylum seekers and others, unprecedented influx means unknown no.s unaccounted for. More emphasis on quantitative data over qualitative has been registered. Little info on education/cultural background, trigger rise to stereotypes. More research on public opinion on asylum seekers.	EPSC’s “solidarity scoreboard” – distribution determined by a no. of criteria. Private sector involved in reception & resettlement. JRC competences – modelling socio-economic considerations & future skills shortages to forecast level of absorption of MS of asylum seekers; pooling together data from different sources to identify composition of new arrivals that go beyond gender, age, nationality; foresight exercise as to how to achieve a full CEAS; European observatory on migration (proposed by EPSC); feasibility study on remote asylum applications; improvements to EURODAC. Understanding dynamics of secondary movements through longitudinal surveys.
UAMs	Worrying no. of UAMs and their inclusion in the society; differential treatment of asylum and non-asylum UAMs; many	Lack of reliable data – strengthen cooperation between MS, Europol, EASO and COM. Lack of comprehensive & comparable data on UAMs receiving some form of protection – only for those seeking asylum.	JRC competences – support systematic collection of data on UAMs; reduce likelihood of disappearance through biometric identification (can be lowered to below 14); work on age assessment; sharing of good practices in accommodating UAMs.

	MS ill-equipped to accommodate UAMs.		
Pillar IV	Policy	Research	Approaches and solutions
Regular migration	Harmonised and consistent data- essential to manage & evaluate policy.	Not easy to compare international data: differing definitions, methods. Little data available at local level. Limited data on migrants' characteristics.	Working groups/Task Force to increase harmonisation of data collection. JRC competence – continuation of RTD funded projects to improve harmonisation, promoting international cooperation in harmonisation. IIASA analysed global migration flows, JRC could assist at EU level. Option of longitudinal surveys to analyse whether migration beneficial for migrant. Big data –may improve understanding of flows.
Demography	Declining and ageing population, retirement policy amended, impact on health & social care	Full demographic data not readily available at int. level. Population projections are inherently uncertain, difficult to explain this to layman. Difficult to retrieve data of certain countries – e.g. non OECD	Multidisciplinary approach towards demography (including accounting for wellbeing). Policy still very much entrenched in present thinking, needs to incorporate demographic trend analysis. EU population migration centre (JRC – IIASA). JRC competence - modelling and foresight to anticipate demographic trends.
Visa Policy	Harmonisation of visa policy difficult – different national interests, visa policy focusses on highly skilled	No exchange of information on visa applications between MS consulates. Little info collected on holders of education and training visas after completion of programme, or on no. of students over-stayers. Criteria for visa sanctions largely unknown.	JRC competence – study on impacts of implemented visa sanctions , study the benefits to career development of education and training visas.

Effective integration	Integration is a long process; cultural integration & social capital also crucial in the process; better educated migrants have difficulty finding jobs that match their skills, difficulty recognising foreign qualifications.	Limitations to surveys that tend to measure integration. Data on ethnic entrepreneurs missing, insufficient of migrants access to public services (education, health, housing). Little info on active citizenship. Data on health needs along the migratory trajectory and in resettlement needed, also impact migration has on EU health care.	Increase sample sizes which measure integration. Acknowledging power imbalance of MS when integrating migrants, Use longitudinal data to assess impact of immigration on access to services. JRC competence – help set up European network of national public health authorities for standardised collection, analysis and synthesis of info on migrant health.
Development	GAMM SDGs Remittances	Gaps in information about remittances – as well as further research re social remittances. Countries of origin – differ and thus partnerships and agreements need to reflect nuances – more understanding of this.	Direct surveys on remittances. JRC competence – contribute to the tool by Global Partnership on Migration and Development to measure policy and institutional coherence for migration and development; developing and monitoring the indicators for SDGs in cooperation with HOME, DEVCO, IOM; doing research on remittances.
Economic effects	Difficult to quantify the macroeconomic effects of migration, yet there is little to suggest that migrants take job from local population. Good integration necessary for positive economic outcomes.	Comprehensive, comparable and reliable stats on economically active migrants largely unavailable. Disaggregated data by socio-economic characteristics are very fragmented. Need to consider migration on smaller EU MS, as well as impact of recession on migrants.	Promoting the collection and harmonisation of economic data and making available through official sources. Longitudinal micro-economic data on migration across EU to address gaps of data inconsistency and availability. Collecting targeted economic data on an ad hoc basis to respond swiftly to emerging policy issues. JRC competence – identify socio-economic impacts of migration; use past work/models to measure economic impacts (EUROMOD, RHOMOLO), study on expected social, macroeconomic and budgetary impacts of current migration.

Annex II: Preliminary inventory of migration data and data sources

Reference	Source	Description	Methodology	Coverage	Type	Link
I. IRREGULAR MIGRATION						
Ia - Access to data	EMN	Statistics on irregular migration (irregular migrants, refusals, apprehensions, voluntary return, good practices in return and reintegration)	Statistics derive from Eurostat, national authorities and other national databases.	EU	Report	http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/europe_an_migration_network/index_en.htm
Ia - Access to data	Eurostat	Data on third-country nationals refused entry at the external borders; found to be illegally present or ordered to leave	Statistics are based on administrative data provided by the national authorities in line with the requirements of Regulation 0862/2007 on the European statistics on migration and international protection.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
Ia - Access to data	Frontex	Quarterly Reports (Detections of illegal border-crossing between Border Crossing Points (BCPs); Detections of illegal border-crossing at BCPs; detections of suspected facilitators; detections of illegal stay; refusals of entry; asylum applications; detections of false documents; return decisions for illegally staying third-country nationals; returns of illegally	Statistical analysis of quarterly changes of eight irregular-migration indicators and one asylum indicator, provided by MS border-control authorities.	EU	Report	http://frontex.europa.eu/

		staying third-country nationals)				
Ia - Access to data	Frontex	Analytical Reports	Analytical reports exchanged by MS used for interpretative purposes and to provide qualitative information, as are other available sources of information, such as Frontex Joint Operations.	EU	Report	http://frontex.europa.eu/
Ia - Access to data	International Centre for Migration Policy Development (ICMPD)	Yearbook on Illegal Migration, Human Smuggling and Trafficking in Central and Eastern Europe	Published since 2000 with the latest available being for 2013. It includes a survey and analysis of border management and border apprehension data from 22 States obtained via a questionnaire disseminated to border agencies, Ministries of Interior and other national authorities dealing with issues related to irregular migration. They often have a topical Special Module in each one. For example, in 2013 this was on the Detention of Migrants and Asylum Seekers.	EU	Report	http://www.icmpd.org
Ia - Access to data	IOM	Mixed Migration flows in Europe and Beyond (data on maritime arrivals and fatalities)	Data are obtained from IOM field staff and through consultations with Ministries of Interior, coastguards, police forces and other relevant national authorities.	International	Database	http://www.iom.int/
Ia - Access to data	UNHCR	Refugees/Migrants Emergency Response (data on arrivals and fatalities)	Data collected in the framework of UNHCR's border activities.	International	Database	http://www.unhcr.org

Ib - Root Causes	Eurostat	Data on asylum applicants, decisions on asylum applications and on Dublin cases	Data based entirely on administrative sources. These databases are disaggregated by gender, age and nationality.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
Ib - Root Causes	IMI - Oxford University	Determinants of International Migration Projects	DEMIG data (on migration policy changes, migration and emigration flows and bilateral migration flow data), EUMACHINE data (on the impact of perception of human rights and democracy on migration aspirations), THEMIS data (on how patterns of migration to Europe developed)	International	Project	http://www.imi.ox.ac.uk
Ib - Root Causes	Internal Displacement Monitoring Centre (IDMC)	Data on internal displacement on an annual basis; plus specific maps displaying the location of IDPs within a country based on first order administrative units.	IDMC compiles information from national governments, international organizations and NGOs, the media, and it also carries out field missions.	International	Database	http://www.internal-displacement.org/
Ib - Root Causes	IOM	Displacement tracking matrices (baseline information on displaced populations, including their number, demographics, needs and conditions in their places of refuge, and to monitor movements such as returns and secondary displacement)	The methodology adopted foresees a first stage of data collection through a network of community-level key informants and government registration data, and a second stage where locations are validated.	International	Database	Specific country's IOM website

Ib - Root Causes	Refworld	News on forced migration / asylum - related topics	Online research tool, compiling information related to situations in countries of origin, policies, or international and national legal frameworks. Data is provided by UNHCR field offices, governments, international, regional and non-governmental organizations, academic institutions and judicial bodies.	International	Database	http://www.refworld.org
Ib - Root Causes	UNHCR	Statistical yearbooks, mid-year reports on displacement trends, the Statistical Online Population Database	Data and trends are based mainly on statistics collected by UNHCR country offices, governments, and non-governmental organizations (NGOs). Most data stems from registrations (77% in 2014), surveys, censuses, and estimations (13% in 2014) with varying usage according to available resources and local conditions.	International	Database	http://www.unhcr.org
Ic - Smuggling and THB	Council of Europe	GRETA based scorecards	The index is based on the reports of the monitoring body of the Council of Europe Convention against Human Trafficking. It assesses compliance with 35 policy requirements on legal institutional framework, assistance protection, enforcement, prevention. Main focus: institutional capacity and operational performance of law enforcement	International	Index	www.coe.int

Ic - Smuggling and THB	Eurostat	Trafficking in human beings	Based on the information provided by member States, Eurostat presents only empirical data as recorded by the authorities, exploring the purpose of exploitation, sector of exploitation with disaggregation for age/sex. It includes information on traffickers and a differentiation between presumed and identified victims.	EU	Report	http://ec.europa.eu/eurostat/web/main/home
Ic - Smuggling and THB	Frontex	Risk Analysis Reports	Frontex data relies on monthly statistics exchanged among MS through the Frontex Risk Analysis Network (FRAN)	EU	Report	http://frontex.europa.eu/
Ic - Smuggling and THB	Goettingen University	3P Index	The index evaluates the quality of governmental policies against the 3P (protection, prevention, prosecution). The country ranking is published every year covering up to 188 countries for a full dataset from 2000 to 2014. The scores are largely based on the US Trafficking in person's reports, supplemented by UNODC reports. Main focus: legislative compliance (criminalization of THB)	International	Index	www.economics-human-trafficking.net
Ic - Smuggling and THB	ILO	Global estimate of forced labour	Data include statistics on trafficking (not including trafficking other than for labour purposes such as for the removal of organs, forced marriage, forced adoption...). ILO mainly focuses on the root causes of trafficking, especially weak labour market governance, ineffective labour migration and recruitment systems using media reports, reports from NGOs, GOs, IOs, academia, trade unions.	International	Report	http://www.ilo.org

Ic - Smuggling and THB	IOM	Global human trafficking database (data on victims of trafficking)	<p>As of 2000, IOM records primary data on VoT under IOM assistance, largely in countries of origin. Additional qualitative analyses include routes and trends, causes and consequences of human trafficking, modi operandi of criminal groups (national level); for a more regional perspective researches have been carried out in the areas of legislation and policy.</p> <p>Statistics are available to the public as analyses presented in studies.</p>	International	Report	http://www.iom.int/
Ic - Smuggling and THB	UNODC	Global Report on Trafficking in human beings (overview of patterns and flows of trafficking in persons at global, regional and national levels)	<p>Produced every two years. The statistical information is collected in two ways: through a short, dedicated questionnaire distributed to Governments and by the collection of official information available in the public domain (national police reports, Ministry of Justice reports, national trafficking in persons reports...). Official statistics from national authorities (criminal justice data) account for 92% of the information collected.</p>	International	Report	http://www.unodc.org
Ic - Smuggling and THB	Walk Free Foundation	Global Slavery Index	<p>Combines an estimation of the number of people in modern slavery, the governments' responses and the contextual factors making individuals vulnerable to slavery (mainly based on the 3P index). Covering 37 variables it covers 167 countries, it uses surveys coupled with desk research analyses.</p>	International	Index	http://www.globalslaveryindex.org

Id - Return	EUI	Return Migration and Development Platform	This platform holds two databases: the Cross Regional Information System on the Reintegration of Migrants (CRIS) and the MIREM dataset on return migrants to the Maghreb. These projects collect both quantitative and qualitative data in certain countries or regions.	EU	Project	http://eui.eu
Id - Return	Eurostat	Data on third-country nationals refused entry at the external borders; found to be illegally present or ordered to leave	Statistics are based on administrative data provided by the national authorities in line with the requirements of Regulation 0862/2007 on the European statistics on migration and international protection.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
Id - Return	Frontex	FRAN report (number of return decisions and effective returns concerning irregular migrant)	It gathers its data from 31 MS border-control authorities within the framework of the FRONTEX Risk Analysis Network.	EU	Report	http://frontex.europa.eu/
Id - Return	IOM	Voluntary Return and Assisted Voluntary Return Programmes	IOM provides data on how many migrants it has assisted through voluntary return programmes. Statistics are available to the public as analyses presented in studies	International	Report	http://www.iom.int/
Id - Return	UNHCR	Returnees IDP and refugees	Data represents the information about UNHCR's populations of concern for a given year and country of residence and/or origin.	International	Database	http://www.unhcr.org

II. BORDER MANAGEMENT

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II - Border	Eurodac / eu-LISA	Annual report on Eurodac (First asylum registration)	<p>Eurodac contains only fingerprints (along with data and place of registration) and no other personal information. MS and Associated countries transmit data to the Central System (which is managed by eu-LISA) in accordance with the Recast Eurodac Regulation.</p> <p>Statistics are available to the public as analyses presented in studies</p>	EU	Report	http://www.eulisa.europa.eu/Pages/default.aspx
II - Border	EUROSUR	Voluntary information sharing platform	<p>Provides Schengen countries with a common operational and technical framework, assisting them in countering cross-border crime, preventing unauthorized border crossings and diminishing casualties of migrants at sea.</p> <p>No access to the public</p>	EU	//	http://frontex.europa.eu/intelligence/eurosur/
II - Border	Schengen Information System (SIS) /eu-LISA	Alerts on certain categories of wanted or missing persons and objects.	<p>The SIS only contains alerts on persons or objects falling under one of the specific alert categories. The eu-LISA is currently managing second generation Schengen Information System (SIS II).</p> <p>Statistics are available to the public as analyses presented in studies</p>	EU	Report	http://www.eulisa.europa.eu/Pages/default.aspx

II - Border	Visa Information System (VIS) /eu-LISA	Registration and verification of short stay visas	It processes data and decisions relating to applications for short-stay visas to visit, or to transit through, the Schengen Area. The system can perform biometric matching, primarily of fingerprints, for identification and verification purposes. It contains full personal data, including fingerprints and face image. The eu-LISA is currently managing the Visa Information System (VIS) . Statistics are available to the public as analyses presented in studies	EU	Report	http://www.eulisa.europa.eu/Pages/default.aspx
III. ASYLUM & PROTECTION						
IIIa - CEAS	DG Migration and Home Affairs	Regular updates on the state of play of the European Agenda on Migration and related goals, including how many refugees were relocated from where and by which countries.	The portal provides latest data and press releases on, for example, reception capacity, hotspots, return operations.	EU	Report	http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/european-agenda-migration/press-material/index_en.htm

IIIa - CEAS	EASO	Asylum trends	<p>Monthly statistical snapshots are produced by EASO's Centre for Information, Documentation and Analysis on the basis of data collected under EASO's Early warning and Preparedness System (EPS).</p> <p>The data is provided directly to EASO by a network of asylum statistics experts (the Group for the Provision of Statistics – GPS) of the European Union Member States plus Norway and Switzerland (EU+) and is provisional and unvalidated.</p>	EU	Report	https://easo.europa.eu/
IIIa - CEAS	ECRE	Asylum Information Database (AIDA) gathering update information on asylum procedures, reception conditions and detention across 18 countries.	Country and annual reports, legal briefings and video testimonies of asylum seekers; conduct fact-finding missions to further investigate important protection gaps established through the country reports. The website also allows for a comparison of different types of data related to the asylum procedure, reception conditions and detention among up to three countries.	EU	Report	http://www.asylumineurope.org/
IIIa - CEAS	Eurobarometer	Public opinion trends in the EU on political and economic questions, including on migration	Survey of all MS, FYROM, Turkey, Montenegro, Serbia and Albania. The survey covers the national population of citizens and the population of citizens of all the MS that are residents in these countries and have a sufficient command of the country's language to answer the questionnaire.	EU	Database	http://ec.europa.eu/COMFrontOffice/PublicOpinion/

IIIa - CEAS	Eurodac / eu-LISA	Annual report on Eurodac (First asylum registration)	Eurodac contains only fingerprints (along with data and place of registration) and no other personal information. MS and Associated countries transmit data to the Central System (which is managed by eu-LISA) in accordance with the Recast Eurodac Regulation. Statistics are available to the public as analyses presented in studies	EU	Report	http://www.eulisa.europa.eu/Pages/default.aspx
IIIa - CEAS	Eurostat	Data on asylum applications, first time applicants, decisions, on the Dublin procedure and resident permits, including for Unaccompanied Minors (UaM).	Data on asylum applications are collected monthly while data on first instance decisions are collected quarterly. Statistics are based on data from Ministries of Interior, Justice or Immigration agencies of the MS and EFTA countries. Data can be disaggregated by age, sex and citizenship, applicants considered to be unaccompanied minors.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IIIa - CEAS	IOM	Global Migration Data Analysis Centre (GMDAC) Global migration trends, including flows and fatalities	It uses statistical data from governments and sources other agencies, as well as NGOs and media.	International	Report	http://iomgmdac.org/
IIIa - CEAS	UNHCR	Statistical Online Population Database Data and trends on the population of concern to UNHCR	Data and trends on refugees, asylum-seekers, returned refugees, internally displaced persons (IDPs) protected/assisted by UNHCR, returned IDPs, stateless persons, and others of concern to UNHCR, in more than 180 countries. Their age and sex are also recorded.	International	Database	http://www.unhcr.org

IIIb - Unaccompanied minors	Eurostat	Annual data on asylum applicants considered to be unaccompanied minors	These data are supplied to Eurostat by the national Ministries of Interior and related official agencies. Data is presented by country and for groups of countries: the European Union (EU28, EU27) and the European Free Trade Association (EFTA).	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IIIb - Unaccompanied minors	FRA	Data on reception conditions	The reports contain descriptive data that was based mainly on interviews, and do not include analysis or conclusions.	EU	Report	http://fra.europa.eu
IIIb - Unaccompanied minors	UNICEF	TransMonEE database	TransMONEE is the database associated with the UNICEF MONEE project on the living conditions of children and adolescents in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS). Figures on children in care (e.g. residential care, care of foster parents or guardians) but these are not disaggregated to show the number of unaccompanied minors. The database is updated every year thanks to the collaboration of National Statistical Offices (NSOs) in the countries of CEE/CIS.	EU	Database	http://www.unicef.org/
IV. LEGAL MIGRATION						
IVa - Access to data	EMN	Inform, Ad-hoc queries, studies, reports	Data on migration statistics for the MS	EU	Report	http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european_migration_network/index_en.htm

IVa - Access to data	Eurostat	Statistics on immigration, emigration and acquisition of citizenship	The statistics cover all EU MS and the period from 1998 to 2013. The immigration data is broken down by age class, gender and country of citizenship, country of birth and country of previous residence. The emigration data is broken down by age, gender, citizenship and country of next usual residence. Data on acquisitions of citizenship is available by age and sex, and by former citizenship.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IVa - Access to data	Eurostat	Residence permits statistics	The statistics are provided by the national responsible authorities, mainly Ministries of Interior or Immigration Agencies of the EU MS and EFTA countries. Data are based entirely on relevant administrative sources. These data are supplied by MS as part of the annual Residence Permits Data Collection conducted by Eurostat according to the provisions of Article 6 of Regulation 862/2007 on statistics on migration and international protection.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IVa - Access to data	ILO	Estimates on labour migration	ILO provides estimates on migrant workers and migrant domestic workers for 176 countries for the year 2013. The estimates are derived by combining data on world population (UN), stock of international migrants (UN) and labour force (ILO).	International	Database	http://www.ilo.org/global/lang--en/index.htm
IVa - Access to data	IOM	Global Migration Data Analysis Centre (GMDAC) Global migration trends, including flows and fatalities	It uses statistical data from governments and sources other agencies, as well as NGOs and media.	International	Report	http://iomgmdac.org/

IVa - Access to data	MS	National Census	Survey existing population periodically, normally carried out every 10 years, have the widest coverage, provide a universal survey of the existing population at a given point in time and are therefore preferred in reconstructing world migration data sets.	National	Database	National Statistical Institute
IVa - Access to data	MS	Population registers and data on resident permits	<p>Population registers accounts of residents within a country. They are typically maintained via the legal requirement that both nationals and foreigners residing in the country must register with the local authorities. Aggregation of these local accounts results in a record of population and population movement at the national level.</p> <p>Residents permit represents an authorization issued by the competent authorities of a country allowing third-country national (non-EU citizens) to stay legally on its territory. Data on residence permits are collected on the grounds for issuing such a permit (e.g education, family, employment, international protection).</p>	National	Database	National registers
IVa - Access to data	OECD	International Migration Outlook	Data provided by national correspondents appointed by the OECD Secretariat with the approval of the authorities of Member countries. Each year the report addresses different topical aspects of migration.	International	Report	http://www.oecd.org/

IVa - Access to data	OECD	DIOC Immigrants in OECD and non-OECD countries for the 2000 census round	<p>The DIOC gives demographic and labour market characteristics data for 32 OECD member countries and 68 non-members in the year 2000.</p> <p>The data is based on the 2000 census round. It includes segmentation by country of birth, gender, education, age, duration of stay, labor force status and occupation. This database is being updated to the years 2010-2011 through a joint project between OECD, the World Bank and the International Migration Institute of the University of Oxford.</p>	International	Database	http://www.oecd.org/
IVa - Access to data	OECD	DIOC-extended Immigrants in OECD and non-OECD countries for the 2000 and 2010 census rounds	<p>The dataset contains information on demographic and labour market characteristics for the 27 OECD countries in the years 2000, 2005 and 2006.</p> <p>The data is reconstructed primarily from census, and when not available from population registers and labor force surveys. The data includes segmentation by country of birth, nationality, gender, education level, age, duration of stay, labor force status and occupation.</p>	International	Database	http://www.oecd.org/
IVa - Access to data	UNDESA	International migrant stock	<p>The dataset presents estimates of international migrant stocks by age, sex and origin. Estimates are available for 1990, 1995, 2000, 2005, 2010 and 2015 and for all countries of the world. The estimates are based on official statistics on the foreign-born or the foreign population.</p>	International	Database	http://www.un.org/en/development/desa/population/migration/index.shtml

IVa - Access to data	UNDESA	International Migration Flows to and from Selected Countries	The data set covers flows of international migrants recorded by 45 countries of destination. The data presents both inflows and outflows according to the place of birth, citizenship or place of previous or next residence. The data includes time series of number of migrants by origin and destination between 2008 and 2013 in separate country files.	International	Database	http://www.un.org/en/development/desa/population/migration/index.shtml
IVa - Access to data	World Bank	Global Bilateral Migration Matrix 1960-2000 Global Bilateral Migration matrix for 2010 and 2013	Matrix of migration flows between 226 by 226 countries covering the population census rounds of 1960, 1970, 1980, 1990 and 2000. The flows are reconstructed from the United Nations Population Division database of migrants stocks. The country of birth approach is given priority in defining migrants. The first database has been expanded in order to include the results of the 2010 census.	International	Database	http://www.worldbank.org/

IVb - Demography	European Commission	The Ageing report	<p>Reports issued every 3 years. It sheds light on the economic, budgetary and societal challenges that policy makers will have to face in the future as a result of demographic trends. The report's long-term projections provide an indication of the timing and scale of challenges that can be expected so as to inform European policy makers about the scale and timing of the challenges they must face.</p> <p>Statistical Annexes (cross-country tables and country fiches) are also provided.</p>	EU	Report	http://ec.europa.eu/economy_finance/publications/european_economy/ageing_report/index_en.htm
IVb - Demography	European Commission / DG Employment, social affairs and inclusion	Employment and social analysis	Reports and survey collected at EU level.	EU	Report	http://ec.europa.eu/social/main.jsp?catId=113
IVb - Demography	OECD	DIOC and DIOC-extended database on Immigrants in OECD and non-OECD countries. International Migration Outlook report Society at a Glance report	The dataset contains information on demographic and labor market characteristics. Relevant and regular publications are the International Migration Outlook (yearly provides the latest statistical information on immigrant stocks and flows, immigrants in the labour market, and migration policies) and The Society at a Glance (biennial report that addresses the growing demand for quantitative evidence on social well-being and its trends across OECD countries).	International	Database	http://www.oecd.org/

IVb - Demography	OECD	International Migration Database (population statistics and projections)	<p>The database provides selected population statistics in the OECD countries. This dataset presents annual population data from 1950 when available by sex and five year age groups. The data is available for the 34 member countries and also for Colombia, Brazil, South Africa and Russian Federation. Data are presented in thousands of persons. There are three sources for the data: national statistics offices, Eurostat and the United Nations.</p> <p>Historical population data and projections are also available</p>	International	Database	http://www.oecd.org/
IVb - Demography	UNDESA	World Population Prospects	<p>The UN publishes global population projections and estimates every two years from 1951 using current population by age, and age-specific rates of fertility, mortality and migration to assess hypothetical population trends and to help understand determinants of population change and inform policy discussions.</p>	International	Database	http://www.un.org/en/development/desa/population/migration/index.shtml
IVb - Demography	Wittgenstein Centre for Demography and Global Human Capital	Global Migration Data Sheet: 1990 - 2010	<p>Demographic changes from births and deaths and refugee movements are included in the estimates. The methodology applied provides maximum likelihood estimates and uses an iterative proportional fitting algorithm.</p>	International	Database	http://www.wittgensteincentre.org/en/index.htm
IVc - Visa	Eurostat	Data on blue cards issued	<p>Data collected from MS EU Blue Cards holders by type of decision and citizenship</p>	EU	Database	http://ec.europa.eu/eurostat/web/main/home

IVc -Visa	MS	Data on employment visas, data education and training visas	Data for different types of visa originate from MS consulates, which collect and provide information at the aggregate level on the annual numbers of successful/unsuccessful visa applications. In contrast to the visitor's visa, issuance of the employment visa contains also information about location (MS) of a third country citizen staying in the EU.	National	Database	National Consulates
IVc -Visa	Schengen Information System (SIS) /eu-LISA	Alerts on certain categories of wanted or missing persons and objects.	The SIS only contains alerts on persons or objects falling under one of the specific alert categories. The eu-LISA is currently managing second generation Schengen Information System (SIS II). Statistics are available to the public as analyses presented in studies	EU	Report	http://www.eulisa.europa.eu/Pages/default.aspx
IVd - Integration	Eurostat	Zaragoza indicators, in the areas of employment, education, social inclusion and active citizenship	These indicators are annually updated by the Eurostat drawing on already harmonised data sources, such as the EU Labour Force Survey and the EU Survey on Income and Living Conditions.	EU	Database	http://ec.europa.eu/eurostat/web/main/home

IVd - Integration	Eurostat	EU LFS (European Labour Force Survey)	The EU LFS is a large household sample survey providing quarterly results on labour participation of people aged 15 and over as well as on persons outside the labour force is conducted in the 27 MS, 2 candidate countries and 3 countries of the European Free Trade Association (EFTA). The Labour Force Surveys are conducted by the national statistical institutes across Europe and are centrally processed by Eurostat.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IVd - Integration	Eurostat	EU SILC (EU-Statistics on Income and Living Conditions)	The EU SILC collects comparable multidimensional micro-data on: income; poverty; social exclusion; housing; labour ; education; health. It covers objective and subjective aspects of these themes in both monetary and non-monetary terms for both households and individuals.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IVd - Integration	ILO	Estimates on labour migration	ILO provides estimates on migrant workers and migrant domestic workers for 176 countries for the year 2013. The estimates are derived by combining data on world population (UN), stock of international migrants (UN) and labour force (ILO).	International	Database	http://www.ilo.org/global/lang--en/index.htm

IVd - Integration	Migration Policy Group (MPG) / Barcelona Centre for International Affairs (CIDOB)	Migration Policy Index (MIPEX) (analyzes policies to integrate migrants)	The MIPEX covers eight policy areas (labour market mobility, education, political participation, access to nationality, family reunion, health, permanent residence and anti-discrimination). Countries covered: EU MS, Australia, Canada, Iceland, Japan, South Korea, New Zealand, Norway, Switzerland, Turkey and the USA.	EU	Index	http://www.mipex.eu/
IVd - Integration	OECD	International Migration Database (employment, unemployment and participation rates by place of birth and sex)	The database provides selected socio-economic data on migration in the OECD countries divided into native-born and foreign born (e.g. employment rates, education, unemployment, labour market participation rates) up to 2014. Data collected from Labour Force Surveys.	International	Database	http://www.oecd.org/
IVd - Integration	OECD	DIOC and DIOC-extended database on Immigrants in OECD and non-OECD countries. International Migration Outlook report Society at a Glance report	The dataset contains information on demographic and labor market characteristics. Relevant and regular publications are the International Migration Outlook (yearly provides the latest statistical information on immigrant stocks and flows, immigrants in the labour market, and migration policies) and The Society at a Glance (biennial report that addresses the growing demand for quantitative evidence on social well-being and its trends across OECD countries).	International	Database	http://www.oecd.org/

IVd - Integration	OECD	PIAAC (Programme for International Assessment of Adult Competencies)	<p>The PIAAC is an international survey that evaluates skills (literacy, numeracy, and problem-solving in technology-rich environments) of working age adults surveyed in 22 OECD member countries. This is done in particular by collecting information on how the skills are developed; maintained or lost; used in the workplace, community or at home; how these skills relate to labour market participation, income, health, and social and political engagement.</p> <p>The survey enables the comparison of mean literacy and numeracy score for native and foreign born in each State analyzed.</p>	International	Database	http://www.oecd.org/
IVd - Integration	OECD	PISA (Programme for International Student Assessment)	<p>The PISA is a triennial international survey, which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. Around 510,000 students in 65 economies took part in the PISA 2012 assessment of reading, mathematics and science representing about 28 million 15-year-olds globally. Of those economies, 44 took part in an assessment of creative problem solving and 18 in an assessment of financial literacy.</p>	International	Database	http://www.oecd.org/

IVd - Integration	OECD / EC	Indicators of Immigrant Integration 2015	<p>A joint publication by the OECD and the European Commission presents the first broad international comparison across all EU and OECD countries.</p> <p>Data are gathered through OECD work on integration issues and Eurostat.</p>	International	Report	http://www.oecd.org/
IVd - Integration	DIW	ESS - The European Social Survey	<p>This is an academically driven cross-national survey that has been conducted every two years across Europe since 2001. It measures the attitudes, beliefs and behaviour patterns of diverse populations in more than thirty nations. In particular, it contains attitudes of respondents about the immigration policy and the social-economic impacts of immigration. Data collected from EU MS plus other European countries.</p>	EU	Database	http://www.europeansocialsurvey.org/
IVe - Maximising dev countries of origin	Centre for Global Development	Commitment to Development Index	<p>It ranks 27 of the world's richest countries on policies that affect development, including migration. The Index gives credit for aid, FDI, research and development, policies that protect the environment, trade policies, global security, and immigration policies. Focuses exclusively on understanding migration from a country of origin perspective and the impact this has on migrants itself.</p>	International	Index	http://www.cgdev.org/

IVe - Maximising dev countries of origin	World Bank	Remittances Data Migration and Remittances Factbook	The WB works with statistics gathering agencies to data on migration and remittance flows. It publishes a comprehensive dataset on remittances data including incoming and outgoing flows, monthly remittances data of selected countries, and estimates of bilateral migration and medical 'brain drain' for over 200 countries.	International	Database	http://www.worldbank.org
IVf - Economic effects country of destination	ESS - ERIC	ESS - The European Social Survey	This is an academically driven cross-national survey that has been conducted every two years across Europe since 2001. It measures the attitudes, beliefs and behaviour patterns of diverse populations in more than thirty nations. In particular, it contains attitudes of respondents about the immigration policy and the social-economic impacts of immigration. Data collected from EU MS plus other European countries.	EU	Database	http://www.europeansocialsurvey.org/
IVf - Economic effects country of destination	Eurostat	EU LFS (European Labour Force Survey)	The European Union Labour Force Survey (EU LFS) is conducted in the 28 Member States of the European Union, 2 candidate countries and 3 countries of the European Free Trade Association (EFTA). The Labour Force Surveys are conducted by the national statistical institutes across Europe and are centrally processed by Eurostat. It also has an ad-hoc module on migration.	EU	Database	http://ec.europa.eu/eurostat/web/main/home

IVf - Economic effects country of destination	Eurostat	EU SILC (EU-Statistics on Income and Living Conditions)	The EU SILC collects comparable multidimensional micro-data on: income; poverty; social exclusion; housing; labour ; education; health. It covers objective and subjective aspects of these themes in both monetary and non-monetary terms for both households and individuals.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IVf - Economic effects country of destination	Eurostat	ECHP - European Community Household Panel	The ECHP is a panel survey in which a sample of households and persons has been interviewed year after year, ran from 1994 to 2001. These interviews covered a wide range of topics concerning living conditions. They include detailed income information, financial situation in a wider sense, working life, housing situation, social relations, health and biographical information of the interviewed. As of 2003/2004, the EU-SILC survey covers most of the above-mentioned topics. MS involved were Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Sweden and the United Kingdom.	EU	Database	http://ec.europa.eu/eurostat/web/main/home
IVf - Economic effects country of destination	OECD	International Migration Database (employment, unemployment and participation rates by place of birth and sex)	The database provides selected socio-economic data on migration in the OECD countries divided into native-born and foreign born (e.g. employment rates, education, unemployment, labour market participation rates) up to 2014. Data collected from Labour Force Surveys.	International	Database	http://www.oecd.org/

IVf - Economic effects country of destination	OECD	DIOC and DIOC-extended database on Immigrants in OECD and non-OECD countries. International Migration Outlook report Society at a Glance report	The dataset contains information on demographic and labor market characteristics. Relevant and regular publications are the International Migration Outlook (yearly provides the latest statistical information on immigrant stocks and flows, immigrants in the labour market, and migration policies) and The Society at a Glance (biennial report that addresses the growing demand for quantitative evidence on social well-being and its trends across OECD countries).	International	Database	http://www.oecd.org/
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Gaps and challenges in the knowledge of migration and demography: Proposals for new approaches and solutions

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Abstract

This report is the result of the research carried out under Task 5 of DG JRC's Task Force on Migration and Demography. The report is structured following the four pillars outlined in the European Agenda on Migration. A few additional chapters are included to cover some aspects not explicitly touched on in the Agenda, but still considered to have a relevant role in migration and an impact on demographic trends.

Contributions answered the following questions:

1. What are main points/findings/debates concerning the priority area/sub-category allocated to you?
2. How does the information gathered in question 1 relate to the scope and the structure of the European Agenda on Migration?
3. What current information and data is available, who is producing it and how?
4. What and where are the main gaps and challenges?
5. What are the solutions or approaches to address these gaps and challenges based upon your research?

To complement this review, two Annexes were created: the first being an overview of the main gaps and challenges as well as the suggested solutions for the whole report (Annex 1), and the second being a preliminary inventory of available migration data and data sources (Annex 2).

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