
RESEARCH REPORT

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Fostering the Integration of Immigrants

Sebastian Till Braun

Integrating Forced Migrants: Evidence from the Displacement of Germans after World War II

The current “refugee crisis” has revived public interest in one of the largest forced population movements in history, the displacement of Germans from Eastern and Central Europe after World War II. The displacement involved at least 12 million Germans who fled or were expelled. Most of the displaced had resided in the former eastern provinces of the German Reich, which Germany relinquished after the war. The enormous inflow of expellees (*Heimatvertriebene*) caused a drastic increase in the population of West Germany, and their integration posed a paramount challenge to the war-ridden country. This article draws on the existing economic literature to provide a concise overview of the economic integration of the displaced and their offspring, and discusses why some regions in West Germany were so much more successful at integrating expellees than others. The article concludes with a brief discussion of potential lessons from the past for the integration of today’s refugees.

HISTORICAL BACKGROUND

The displacement occurred in three distinct phases between 1944 and 1950 (for further details see e.g., Connor 2007; Douglas 2012). The first phase took place during the final stages of World War II when hundreds of thousands of Germans from Germany’s eastern provinces fled the approaching Red Army. Most of these refugees planned to return home after the end of the war, and gathered in the West German regions that were most accessible to them. After Nazi Germany’s unconditional surrender in May 1945, Polish and Czech authorities began to drive their remaining German populations out. These so-called wild expulsions, which marked the second phase of the displacement, were not yet sanctioned by an international agreement. The third phase began after the Potsdam Agreement was concluded in August 1945. The Agreement placed the former eastern provinces of the German Reich under Polish or Russian control, and stipulated that all Ger-

mans remaining east to Germany’s new border had to be transferred to post-war Germany.

Most of the 12 to 14 million expellees were re-settled in West Germany. By September 1950, expellees accounted for 16.5% of the West German population—every sixth West German resident was an expellee. However, the population share of expellees differed greatly across West German counties (*Kreise*). It ranged from 1.8% in the south-western county of Pirmasens to 41.2% in the north-western county of Eckernförde. Figure 1, adapted from Braun and Dwenger (2017), gives an overview of the population share of expellees across West German counties. These substantial regional differences were largely the result of undirected flight to the most accessible regions in West Germany, and of France’s refusal to accept expellees into its occupation zone.

THE ECONOMIC INTEGRATION OF EXPELLEES IN WEST GERMANY

The economic integration of millions of expellees was widely perceived as one of the most daunting challenges facing West Germany after the war. Lüttinger (1986, 1989) was one of the first to provide a detailed empirical assessment of the long-run economic integration of expellees in West Germany. The author compares the socio-economic situation of expellees to that of native West Germans a quarter-century after the displacement. He shows that in 1971, there were still significant differences between both groups. In particular, expellees were still significantly over-represented among unqualified workers and under-represented among the self-employed. These findings cast doubt over the view, widely held by the contemporary German public, that the integration of expellees was swift and largely a success story.

Bauer et al. (2013) reinforce Lüttinger’s conclusion. The study accounts for pre-war differences in the socio-economic characteristics of expellees and native West Germans, and also considers the relative income position of forced migrants. It shows that 26 years after the end of the war, expellees and native West Germans who were comparable before the war performed strikingly differently in post-war Germany. First-generation expellees had lower levels of income than their native counterparts, less wealth and were less likely to be self-employed. Only the children of expellees were able to catch up with their native peers.

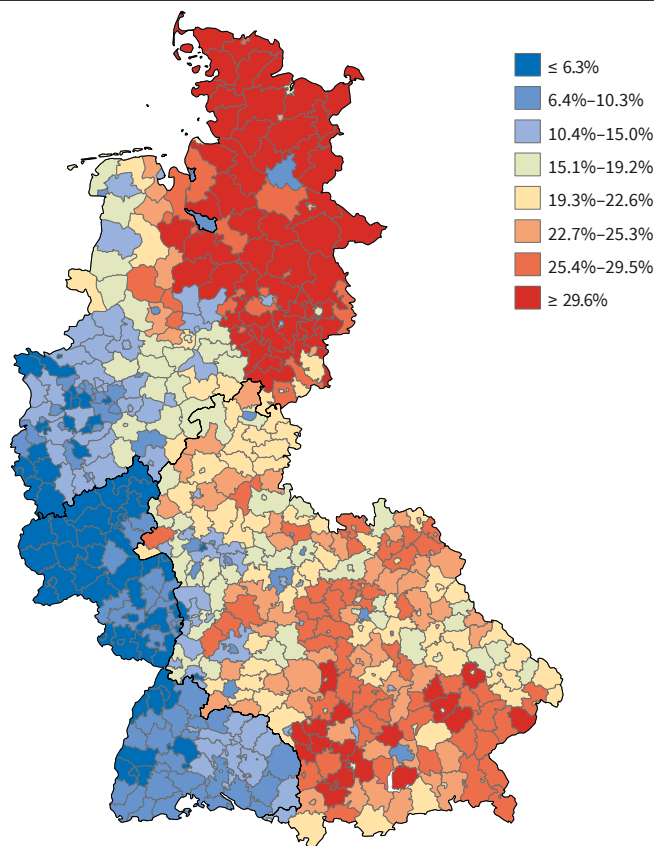
Falck et al. (2012) evaluate the effectiveness of the Federal Expellee Law (*Bundesvertriebenengesetz*) of 1953 in reducing the unemployment rate of expellees,



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Figure 1

Population Share of Expellees September 1950



Source: Braun and Dwenger (2017), based on data from the population and occupation census of September 1950.

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restoring their pre-war occupational status, and promoting entrepreneurship. The law instructed public employment agencies to give expellees preferential treatment when assisting unemployed workers with their job search. Tax incentives and credits at subsidised interest rates were meant to foster self-employment and promote entrepreneurship. However, Falck et al. (2012) conclude that the law did not speed up the labour market integration of expellees.

THE EFFECT OF THE LOCAL ENVIRONMENT ON THE INTEGRATION OF EXPELLEES

Taken together, these papers provide a comprehensive empirical assessment of the integration of the displaced and their offspring until 1971. However, neither of these papers study the role of the local environment for the integration process of expellees. This is the focus of a recent study by Braun and Dwenger (2017).

The authors document that the economic, social, and political integration outcomes of expellees varied dramatically across West German counties. Figure 2 gives an example of the large regional differences in economic outcomes. The figure shows that the unemployment rate of expellees in September 1950 ranged from less than 4% in the west of West Germany to over

32% in the north and south-east of the country. The paper reports similarly pronounced regional differences in the degree of social integration, as measured by inter-marriage rates between expellees and native West Germans and in the degree of political integration, as measured by the vote share of parties campaigning on an outspoken anti-expellee stance.

Braun and Dwenger (2017) show that two factors explain most of the regional differences in integration outcomes. Firstly, Braun and Dwenger (2017) find that larger population shares of expellees had a markedly negative effect on the integration outcomes of expellees. Higher expellee shares were, for instance, associated with higher unemployment rates of expellees. Secondly, Braun and Dwenger (2017) find that integration outcomes were considerably worse in agrarian counties than in industrialised counties. This is in line with the hypothesis that rural economies had little capacity to

productively absorb the inflow of expellees, and that natives living in these areas were generally less open to newcomers (Pfeil 1958).

LESSONS FROM THE PAST?

Current debates on the integration of today's refugees frequently cite the integration of expellees as a historical precedent. But does the integration of expellees really make for a good role model for the integration of today's refugees? Probably not. Today's situation is too different from the situation after World War II. The expellee inflow was much larger than the inflow that Germany faces today. War destruction initially hindered the integration of expellees, whereas the reconstruction boom in the 1950s fostered economic integration. More importantly, the educational attainment of expellees and native West Germans was very similar (Bauer et al. 2013), whereas today's refugees are often low skilled (IAB 2015; Worbs und Bund 2016). Expellees and native West Germans also both spoke German as their mother tongue. By contrast, limited language skills are probably one of the most important obstacles to the economic integration of today's refugees.

Although these stark differences limit the direct comparability between the two migration episodes, at

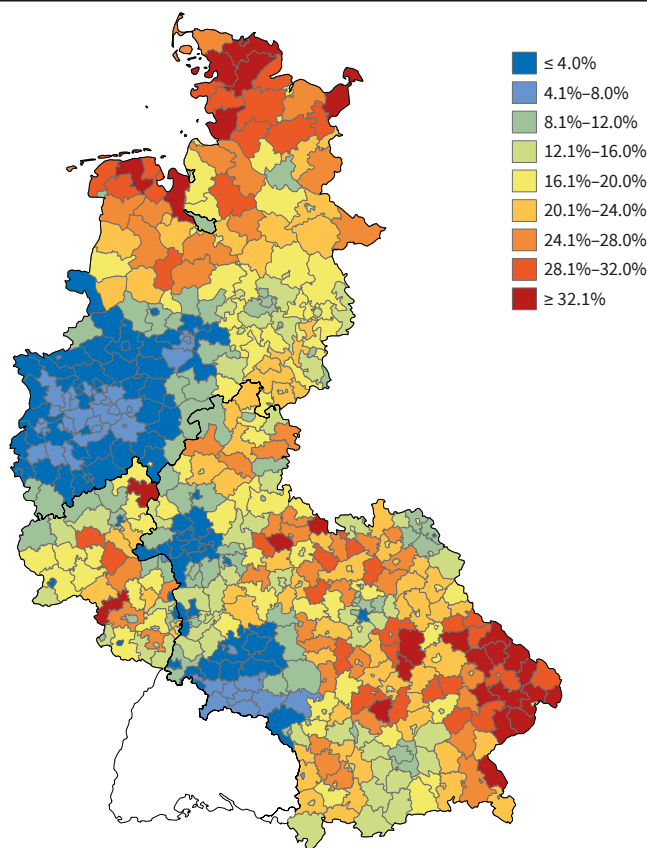
least three lessons can be learned from the existing evidence on the integration of expellees. Firstly, the integration of forced migrants takes time. Although the post-war expellees spoke German and were just as qualified as the West German population, they performed considerably worse than the non-displaced population in the West German labour market—even a quarter century after the displacement. Secondly, the decision of where to resettle refugees within a country is likely to have a first order effect on integration outcomes. While further research in the area is warranted, Braun and Dwenger's (2017) results suggests that the local migrant density and the local economic structure should be key considerations when resettling refugees. Thirdly, sending refugees to rural areas is unlikely to foster rural revival, as often suggested in today's debate. Integration is generally more difficult in rural than in urban areas, and refugees are likely to move on to urban areas once they are allowed to do so. This is exactly what happened after World War II: Schleswig-Holstein alone lost over 10% of its population in the 1950s, as expellees moved from the rural and agrarian regions in the North to the urban areas and industrial centres in the West of Germany.

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Figure 2

Unemployment Rate of Expellees September 1950



Source: Pfeil (1958), based on data from the population and occupation census of September 1950. © ifo Institute

Lüttinger, P. (1989), *Die Integration der Vertriebenen. Eine empirische Analyse*, Campus Verlag, Frankfurt am Main/New York.

Pfeil, E. (1958), "Eingliederungschancen und Eingliederungserfolge: regionalstatistische Analysen der Erwerbstätigkeit, Berufstellung und Behausung der Vertriebenen", *Mitteilungen aus dem Institut für Raumforschung* 35.

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Eva Degler, Thomas Liebig and Anne-Sophie Senner

Integrating Refugees into the Labour Market - Where Does Germany Stand?¹



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In 2015 and 2016, Germany experienced humanitarian immigration on an unprecedented scale, registering roughly 1.2 million asylum claims. Previous recognition rates for major countries of origin suggest that an estimated 700,000 of these claimants are likely to receive international protection and will, as a result, be allowed to stay in Germany.²

Integrating these newcomers into the labour market will pose a major challenge in the years ahead. Evidence from a special module in the 2014 European Union Labour Force Survey suggests that refugees³ in the past took up to 20 years to reach the same employment rates as native-born Europeans (see Figure 1).

This is an emerging issue for Germany. In June 2017, refugees and asylum seekers already accounted for over one in ten job-seekers (Bundesagentur für Arbeit, 2017), and this figure is expected to grow further. This does not come as a surprise. Compared with other migrant groups, refugees tend to face greater difficulties in finding employment. They usually arrive with a weak, or inexistent attachment or link to the host country and its labour market and have obtained their skills in a very different context. In addition, due to the forced nature of their migration, they often lack proper documentation to certify their level of education or skills; and many suffer from physical and mental health issues. In addition, a large share of refugees lack basic education, particu-

larly if they come from countries with long and protracted conflicts.

To remedy these multiple disadvantages, a clearly targeted, well-coordinated and comprehensive integration policy response is vital. OECD work has shown that early intervention is crucial, which includes language training and upskilling measures, and that early labour market integration is a key predictor of future outcomes in the long-run. It is also essential to implement tailored solutions that account for the diversity of refugees, and to effectively co-ordinate different measures (see OECD 2016). At the same time, employers need to be engaged since ultimately, they take the decision of whether to hire refugees.

PROVIDING ACTIVATION AND INTEGRATION SERVICES AS SOON AS POSSIBLE

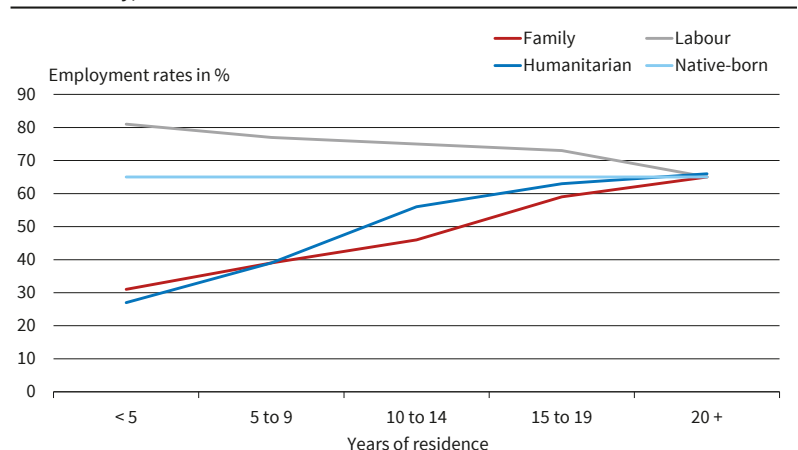
Early intervention is crucial for long-term integration outcomes. A key issue relates to the access of asylum seekers waiting for the outcome of their procedure to integration measures, particularly when those procedures are lengthy. Where this is the case, this group faces the risk of waiting months, if not years, before receiving language training and other support, thereby delaying their integration process.

Germany has in recent years undertaken considerable efforts to facilitate the early integration of this group, notably by opening its main policy tool – the Integration Courses – up to asylum seekers with very good prospects of being allowed to stay in Germany. In 2016, asylum applicants from Eritrea, Iran, Irak, Somalia and Syria benefitted from this policy. The early focus on German language training is vital from a labour market perspective. Figure 2 documents that refugees with an intermediate knowledge of German have considerably higher employment rates (65%) than those who have only basic German language knowledge (28%).

A recent employer survey conducted by the OECD jointly with the German Association of Chambers of

Figure 1

Employment Rate of Immigrants by Reason for Migration and Years of Residence in Host Country, 2014



Source: EU-OECD (2016).

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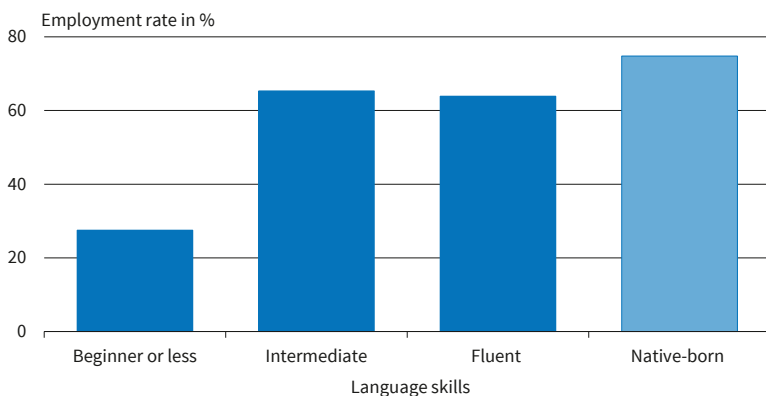
¹ This article is based on key findings from the OECD reports: OECD (2017), Finding their Way. Labour Market Integration of Refugees in Germany, OECD Publishing, Paris. <http://www.oecd.org/els/mig/Labour-Market-Integration-Refugees-Germany-2017-de.pdf> and OECD (2016), Making Integration Work: Refugees and Others in Need of Protection, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264251236-en>. Any additional opinions expressed or arguments employed herein are solely those of the authors and do not necessarily reflect the official views of the OECD or its member countries.

² Between January and June 2017, around 100,000 new asylum applications were lodged, partly reflecting the administrative backlog in processing cases. Over the same time period the number of newly arrived migrants declaring at the border that they wish to apply for asylum fell sharply and totaled approximately 90,000 persons.

³ The terms 'humanitarian migrant', 'refugee', and 'persons in need of protection' are used interchangeably in this article.

Figure 2

Employment Rate of Past Refugees in Germany by their Level of Language Skills, 2014
Age 15-64



Source: OECD calculations based on the German Microcensus (2016).

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Commerce and Trade (DIHK) and the German Ministry of Labour and Social Affairs (BMAS) confirms the importance of German language knowledge in the German labour market. Approximately half of the respondents expect at least good German language skills, even for low-skilled jobs (OECD 2017a). This share reaches 90% for medium-skilled jobs.⁴

To ensure that the many recent arrivals will be able to access language training swiftly it is important to further extend the availability of Integration Courses. While Germany has significantly augmented the number of available spots, a large unmet need remains: Of the 560,000 persons who became eligible to participate in 2016, only 360,000 actually started a course in that year, leaving 240,000 waiting. This is a conservative estimate, as among those who started a course in 2016 some are likely to have become eligible before 2016.

FACILITATING EARLY ACCESS TO THE LABOUR MARKET

Early labour market integration is a key determinant of future labour market outcomes, and legal access to the labour market is a precondition for this to happen. Indeed, many refugees are highly motivated to enter the labour market quickly. Prolonged absences from the labour market also entail a depreciation of skills, which – combined with gaps in employment history – can produce severe scarring effects later on. In recent years,

⁴ The survey is not representative and includes responses from approximately 2200 German employers.

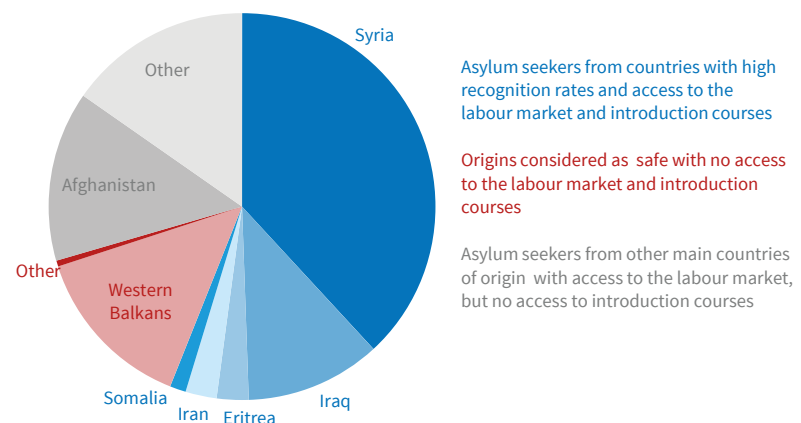
Germany has considerably relaxed labour market access conditions for asylum seekers, such that asylum seekers – except those from origin countries considered “safe” – can now obtain labour market access after just three months if certain conditions are satisfied. This is among the more liberal regimes in the OECD (see OECD, 2016a for an overview of the waiting period for labour market access in OECD countries). A significant number of persons have benefitted from the new rules: in 2016, the German Federal Employment Agency approved 85,000 requests for employment per-

mits for asylum seekers. Together with the access to integration courses for asylum seekers outlined above, the following picture emerges in terms of early integration (Figure 3).

These changes are an important step in the right direction and show that Germany has learned from past experiences in the early 1990s. At that time, there were few integration offers and humanitarian migrants from Yugoslavia were largely excluded from the labour market for many years, making it harder for them to integrate later on. Nevertheless, some challenges remain; for instance, it may still be relatively complex for employers to obtain a work permit for asylum seekers. In the majority of cases, both the Federal Employment Agency and the local immigration office have to approve employment requests and the latter enjoy substantial discretion in this regard. More information about the grounds on which local immigration author-

Figure 3

Asylum Seekers in Germany by Origin and Access to Labour Market and Integration Support, 2015 and 2016



Source: Authors' calculations based on asylum statistics from the Federal Office for Migration and Refugees.

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ities decide would render the process more transparent for employers.

SUPPORTING EMPLOYERS IN TRAINING AND HIRING REFUGEES

Employers play a key role in integrating humanitarian migrants into the labour market. In the end, it is their willingness to hire and train refugees that determines whether refugees have the capacity to become fully autonomous members of their host societies. Against this backdrop, it is vital to create conditions that encourage employers to harness refugees' skills potential.

One of the main principal obstacles frequently encountered by employers who intend to hire asylum seekers, tolerated persons or persons benefitting from subsidiary protection - a rapidly growing group - is legal uncertainty regarding the person's status and prospects of remaining in the country. In the OECD employer survey, almost 70% of employers cited this as a problem (OECD 2017a). Germany has addressed this issue with a new scheme, the '3+2 regulation', which, under certain conditions, entitles asylum seekers and tolerated persons who are in vocational education and training to remain in the country for the duration of their training (three years). After this period, they may stay for another two years on condition that they find employment corresponding to their level of qualification. This regulation not only improves legal certainty for employers, but also creates a strong incentive for VET⁵ students to finish their training. However, for the time being, it does not explicitly cover persons benefitting from subsidiary protection and has not yet been implemented consistently nationwide.

Another issue often cited by employers is the need for longer-term support beyond the hiring process. A case in point is the provision of vocation-specific language training during employment. Vocation-specific language training tends to be the single most effective type of language training in terms of improving labour market outcomes. Indeed, three out of four of the German employers who participated in the OECD-DIHK-BMAS employer survey consider this a "very important" measure, suggesting a need to further extend the available offer, ideally directly on-the-job (OECD 2017a).

In response to the crisis, Germany has increased the number of spots in vocation-specific language training

to 175,000 for the year 2017, versus 29,000 in 2016 and 24,000 in 2015. Professional mentoring programmes could complement these efforts and further assist employers with the integration of refugees in a specific job-segment. Across the OECD, such schemes are still relatively rare, but are gradually developing in countries like Austria, Norway and Switzerland, where they are part of active labour market policies. In Canada, they can be a component of bridging programmes for migrants with foreign qualifications who need to fill specific skill gaps to have their degrees recognised in the host-country (OECD 2017b).

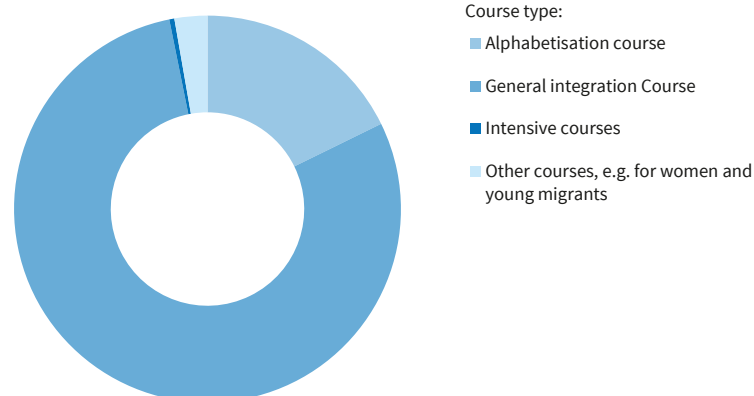
DEVELOPING TAILOR-MADE INTEGRATION PATHWAYS

Inflows of humanitarian migrants have become more diverse in recent decades, not only in terms of countries of origin, but as far as their education levels, family situations and resources are concerned. Data from Germany suggests that 17% of the persons who filed an asylum claim in the first half of 2016 were highly educated, while around 20% only had basic education and a further 10% had no formal education at all (Neske und Rich 2016). This diversity in individual profiles makes integration challenging. There is no "one-size-fits-all" integration trajectory. Instead, integration offers increasingly have to factor in refugees' skills, their educational background and family situation and cover a range of measures that differ in type and length.

Over the past two years, Germany has significantly diversified its integration offers for new arrivals. For example, the number of language courses for illiterate persons have been increased and accounted for 17% of all courses in the first half of 2016 (see Figure 4). At the other end of the skills spectrum, however, there are only very few offers for highly skilled persons as of now. Similarly, there are few courses only for groups with

Figure 4

Participation in Integration Courses
January–September 2016



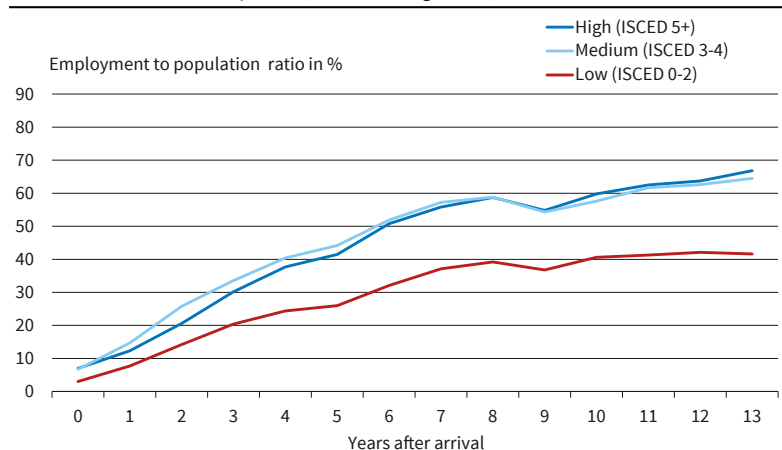
Source: Federal Office for Migration and Refugees (2016).

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⁵ VET stands for vocational education and training.

Figure 5

Employment Population Ratio of Refugees and Accompanying Family by Duration of Residence and Education, 2014 (Cohort Arriving in 2000)



Source: OECD (2016b); Data from Statistics Sweden.

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specific needs like parents, young migrants and unaccompanied minors.

Ideally, tailor-made offers go beyond the provision of language training and combine language learning with professional training in a long-term perspective. Offers of this kind are still limited and need to be expanded and adjusted to meet individual needs. An example of such offers are preparatory traineeships prior to vocational education and training, which can be combined with language training. In November 2016, a total of 3,200 persons participated in preparatory traineeships, of which 30% were asylum seekers or refugees.

For poorly-educated refugees — especially for those lacking basic qualifications — labour market integration is often a long-term process. Data from Sweden, for example, show that less than 30% of poorly-educated refugees were in employment five years after their arrival in the host country (Figure 5).

In the Scandinavian countries, integration programmes of two to three years duration combine language and professional training and/or long-term adult education. In Germany, a range of initiatives have been developed with a view to providing refugees with an opportunity to obtain work experience in the German labour market. However, for low-skilled refugees, a longer-term perspective is needed, with a view to achieving employability and this should combine language and professional training. Low-skilled women with little or no work experience are a particularly important group in this regard, since their labour market outcomes tend to be particularly poor. At the same time, improving their integration is likely to convey significant benefits, including in terms of better outcomes for their children.

The results of the OECD-DIHK-BMAS employer survey also suggest a need for targeted upskilling measures for low-skilled refugees: Employers who have hired asylum seekers and refugees in the past reported

to have mainly recruited refugees into low-skilled positions, but stated that future needs would rather be in the skilled and highly skilled job segment (OECD 2017a).

IMPROVING COORDINATION AMONG ALL RELEVANT STAKEHOLDERS

Across the OECD, integrating refugees and asylum seekers into the labour market is a cross-cutting issue that involves a wide range of stakeholders such as different levels of government and different branches therein, as well as social partners, service providers

and civil society organisations. Ensuring that these actors work together efficiently is a challenge that is not unique to Germany, but its federal structure adds a layer of complexity.

Another particularity of the German context is the fact that the institutional responsibility for labour market integration is split among the Federal Employment Agency (BA), which is in charge during the asylum procedure, and the Jobcenters, who take over once an asylum seeker obtains international protection. This change in responsibility entails certain difficulties, including problems in the transmission of relevant data and information on language training or other preparatory integration measures that a person has started during the asylum procedure.

To ensure continuity in the integration pathway, it is important to track and communicate what kind of integration activities were already undertaken and with what outcome. Countries with register systems — like the Scandinavian countries — do not face this issue as strongly. They attribute a personal identification number to each person — both immigrants and native-born — which links the different administrative registers and thus provides a broad range of information including residence status, education, employment and participation in programmes.

In Germany, data exchange between different government agencies is slowly improving following legal changes in early 2016, which enabled a broad range of stakeholders, including the BA, Jobcenters and health and youth services, to access and feed into the Central Register of Foreign Nationals (AZR). The AZR stores administrative information on foreigners, including on education and professional background and language skills. Currently, however, the register only provides such detailed information for a small share of new arrivals and the question remains whether having two separate agencies in charge of labour market integration for asylum seekers and refugees is desirable and

efficient. Recent initiatives in some of the federal states to set up one-stop shops for labour market integration, which bring together multiple actors under one roof, including the BA and the Jobcenters, are a positive development and would merit expansion.

Another domain in which coordination needs to improve is language training, which is under the auspices of the Federal Office for Migration and Refugees. Both integration courses and vocation-specific language training are coordinated by a network of regional coordinators, but a single co-ordinator can be in charge of thousands of course participants. To ensure that language training is well-aligned with labour market needs, jobcenters should also be involved in the planning and coordination of language training.

CONSIDERING EMPLOYMENT PROSPECTS WHEN DISPERSING ASYLUM SEEKERS AND REFUGEES ACROSS THE TERRITORY

Local labour market conditions are an important determinant of future labour market outcomes (Aslund and Rooth 2007). In areas where jobs are readily available, refugees will integrate easier and faster. In most OECD countries, however, dispersal schemes mainly seek to ensure an even distribution of asylum seekers and refugees and of the financial burden related to their reception. Refugees are often dispersed to areas with available housing – which usually do not coincide with attractive labour market conditions. Only a few OECD countries like Sweden and New Zealand consider local labour market conditions and employment prospects in their dispersal schemes (see OECD 2016a for an overview of dispersal criteria for asylum seekers and refugees).

In Germany, asylum seekers are allocated across the federal states based on tax revenue and population size, but the resulting distribution de facto mirrors population size. The subsequent allocation to the municipalities takes place at the discretion of each federal state. In most cases, distribution is by population size. From an integration perspective, distribution should crucially consider employment-related criteria, such as local unemployment rates and, where possible and appropriate, specific local skills shortages.

More important than the municipality where asylum seekers are initially accommodated, is the place where they settle once they have obtained international protection. Until August 2016, when the Integration Act was introduced, persons were allowed to move to a different municipality after obtaining international status. Currently, however, refugees are required to remain in the federal state into which they were initially assigned for a duration of three years. The Act allows for exceptions from this requirement on the condition that mobility is relevant for integration (e.g. employment, training, specific integration measures). This framework appears to be a carefully-balanced compromise between the objective of avoiding concentration

in certain areas and the objective of facilitating integration. Yet a proper evaluation of the scheme is currently not feasible due to a lack of data on the number and motives of the exceptions granted to date.

CONCLUSION AND OUTLOOK: MANAGING THE TRANSITION FROM CRISIS MANAGEMENT TO A LONG-TERM AND SUSTAINABLE INTEGRATION STRATEGY

To conclude, Germany has reacted relatively quickly in the face of large inflows of asylum seekers, and has taken many steps in the right direction. With strong support from civil society, Germany has adapted its political and administrative framework to facilitate the labour market integration of asylum seekers and refugees. It is particularly worth noting the measures taken to facilitate labour market access for asylum seekers and the provision of language training for asylum seekers who are highly likely to obtain international protection. However, developing a comprehensive and long-term integration strategy that closely links targeted language and professional training remains a challenge. This requires better coordination among all relevant stakeholders. Another important task will be to support employers by extending vocation-specific language courses; legal certainty regarding length of stay is also a key issue for this group.

Adopting a long-term approach is particularly important for refugees who have arrived with little or no previous education. Without significant, long-term support this group will struggle with employability. Such an investment will be costly but the returns will pay off in the long run and extend to future generations.

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Olena Havrylchuk and
Nadiya Ukrayinchuk

The Impact of Limbo on the Socio-Economic Integration of Refugees in France¹

When asylum seekers arrive in a country, they have to apply for asylum. They are initially granted a temporary residence permit linked to the asylum application, while the decision concerning a permanent refugee status is pending. During this waiting time, asylum seekers are in limbo: they do not know if they will be protected after their residence permit expires and are unable to plan for the future. In France, for example, they are denied family reunion, are mostly excluded from the labour market, cannot attend official language classes, cannot open a bank account and do not have access to other forms of basic rights and settlement assistance available to refugees on permanent protection permits.

What is the impact of limbo on the socio-economic integration of refugees? Integration is a two-way process. On the one hand, inclusive public policies and welcoming societal attitudes could speed it up, while administrative barriers and discriminatory attitudes could erect obstacles on the road to integration. On the other hand, asylum seekers and refugees have to exert efforts to invest in human and social capital, and the amount of effort made could be related *inter alia* to administrative barriers. Uncertainty over the future during the limbo period might diminish the willingness of refugees to invest in country-specific human capital in the destination country, such as language and friends, or to use this time to seek the recognition of qualifications or skills.

HOW SEVERE IS LIMBO?

The severity of the limbo period could be characterised by its length, access to employment and other rights during this period, as well as the likelihood of receiving a protection status in the future.

¹ The study was undertaken as part of the project "Politiques migratoire et d'Accueil, Capital humain et Performances économiques (PACaPe)" financed by the Direction générale des étrangers en France (DGEF). We are grateful to the participants of the 7th International Conference "Economics of Global Interactions", held in Bari, Italy in 2016 for useful discussions and suggestions.

Based on the Eurostat statistics, France has one of the lowest rates of granting protection to refugees (Figure 1). In 2016, 67% of asylum seekers were denied protection status (refugee status, subsidiary protection or humanitarian reasons) in France, versus 31% in Germany, 30% in Sweden and 42% in Spain. This means that asylum seekers in France spend their limbo time in complete uncertainty about their future.

According to the ELIPA survey², the average length of limbo in France was 2.8 years in 2009, but it varies significantly, from one year in the first quartile to three years in the last quartile.³ The box-and-whiskers plot (Figure 2) shows that the distribution of limbo varies considerably from one country to another. The median limbo period ranges from half a year for Iraqi refugees to six years for Malian refugees.

The figure from the ELIPA survey on the length of limbo (2.8 years in 2009) is much higher than the official figures of the OFPRA (L'Office français de protection des réfugiés et apatrides - French agency responsible for the provision of refugee protection to asylum seekers) with 118 days in 2009 (Figure 3). The discrepancy is explained by two main reasons. Firstly, the ELIPA survey allows us to measure the limbo period starting from the moment that refugees arrive in France until the moment that they obtain protection, while OFPRA considers that waiting time starts at the moment their application is submitted. Secondly, the ELIPA survey considers only successful applications, which means



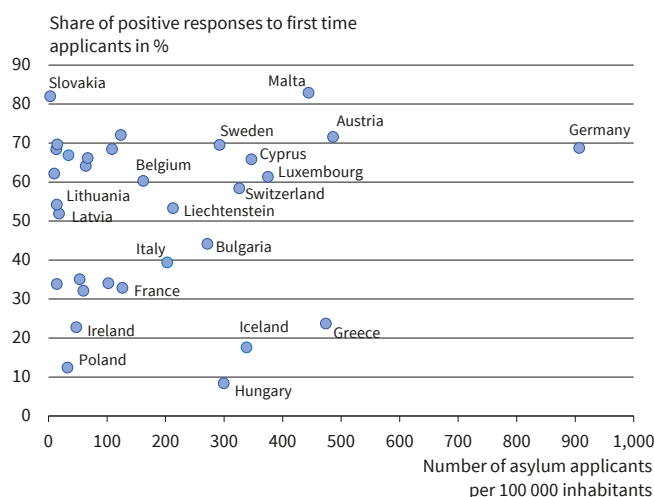
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Figure 1

Asylum Application Rate vs. Recognition Rate of Refugee Status In EU countries

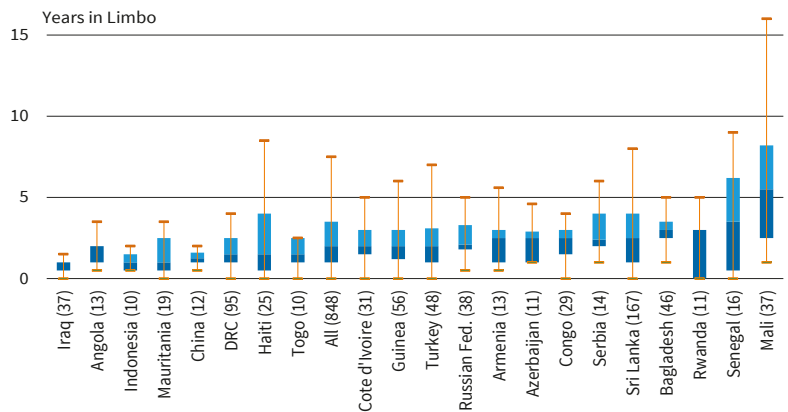


Source: Eurostat (2016); authors' calculations.

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Figure 2

Box-and-Whiskers Plot for the Years in Limbo for Refugees from Different Countries



Notes: The box presents 25th and 75th percentiles, the line in the box indicates the median, while whiskers are drawn to span all data points within the 1.5 interquartile range of the nearer quartile. Number in paranthesis indicate the number of observations for each country.

Source: ELIPA survey; authors' calculations.

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THE IMPACT OF LIMBO EXPLORED VIA TESTIMONIES

A number of sociological studies rely on testimonies to explore the effect of limbo. Surveying refugees in Canada, Coates and Haward (2005) conclude that limbo poses undue costs in the form of suppressed labour market activity, debilitation from mental duress and excessive use of social assistance. Having interviewed Somali refugees who live for protracted periods of time in camps⁵ in the North Eastern Province of Kenya, Abdi (2005) argues that such situations result in wasted human capacity and deprived refugees of

that it ignores most of the applications with accelerated procedures that usually end in refusal.⁴

Another particularity of the French asylum procedure is the significant difference between the initial rate of admission and the final rate after the appeal decision at the National Court of Asylum (Cour Nationale du Droit d'Asile): a difference of 16 percentage points in 2005, 21 percentage points in 2011 and 10 percentage points in 2016. The rate at which the National Court of Asylum overturns decisions of OFPRA and grants refugee status to asylum seekers is very high when compared to Sweden (5%) and Germany (1%). Despite a recent improvement in the quality of decisions taken by the OFPRA, the need to appeal prolongs the waiting time and increases uncertainty on the part of asylum seekers, in other words, the time that they spend in limbo.

The severity of limbo is measured not only by its duration, but also by the rights of asylum seekers during this time, particularly their right to work. Asylum seekers in France have the right to apply for a work permit if the OFPRA has not ruled on their application within nine months. Compared to other OECD countries, this is a relatively long waiting period (Figure 4). Moreover, to obtain this permit, the asylum seeker has to provide proof of a job offer and the duration of the work permit cannot exceed the duration of the residence permit linked to the asylum application (six months). The lack of a work permit also complicates access to education, because asylum seekers do not have the right to complete an internship (often obligatory for the graduation). Asylum seekers do not have access to vocational training schemes, as the latter are also subject to the issuance of a work permit.

⁴ 40% of applications were treated with an accelerated procedure in 2016. An accelerated procedure is offered to asylum seekers from countries that are considered to be safe, as well as to those who have already been definitely refused, but reapply anyway. The rate of protection for the accelerated procedure was as low as 13% in 2016.

their dignity. Refugees are dismayed by their dependency on inadequate aid, and express diminished self-worth due to their inability to improve their situation or escape from the conditions of camp life. Leach and Mansouri (2004) collect the testimonies of mostly Iraqi refugees living in Australia under the temporary protection regime, who testify to feeling marginalised and depressed, with little hope for their future.

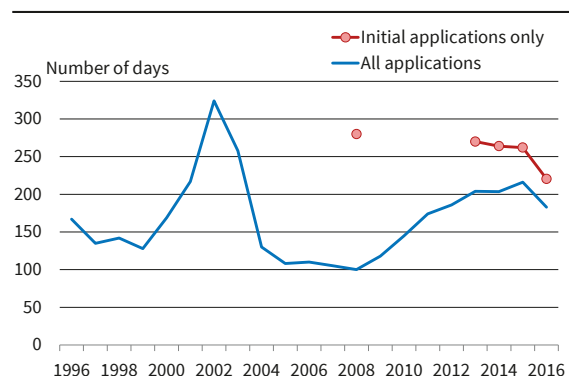
The “mental” cost of complicated asylum procedures or provisions of only temporary protection has been also documented by mental health professionals. Luebben (2003) undertook a testimony project for traumatised Bosnian refugees in Frankfurt, Germany. They find that protracted periods of limbo trigger existential fears, the resurgence of trauma, feelings of hopelessness and deep despair and can actively contribute to further destabilising survivors.

Sociologists document a “dependency syndrome” in refugee camps, which engender passivity, destroy all

⁵ Living conditions of asylum seekers can differ from country to country. While some live in camps, others live in specialized hosting centres like CADA (Centre d'accueil de demandeurs d'asile) in France.

Figure 3

Average Processing Time of Asylum Applications in France

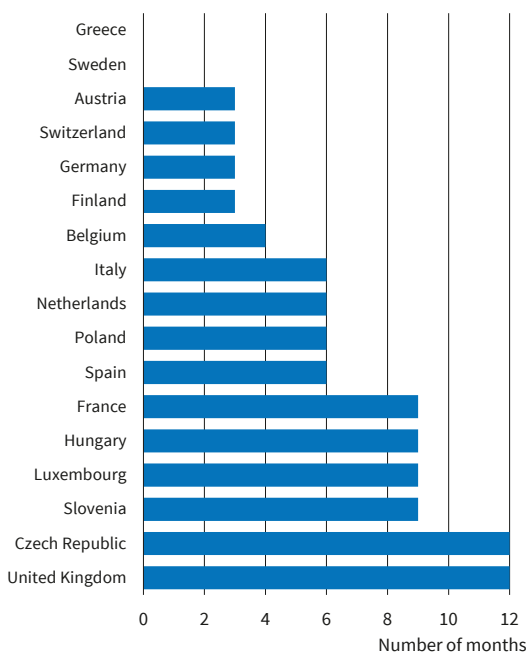


Source: OFPRA (2001-2016).

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Figure 4

Minimum Waiting Periods for Accessing the Labour Market for Asylum Seekers in Selected EU Countries



Source: OECD.

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sense of initiative taking and damage the self-worth of refugees. Waiting for others to provide for one's needs may eventually lead to complete dependency on donations. Other researchers refute the concept of a dependency syndrome by arguing that refugees lack alternatives at this particular period of life because they are removed from social, political and economic coping systems (Kibreab 1993; Abdi 2005; Clark 1985).

One can compare the limbo effect to the hysteresis effect after long spells of unemployment, which is well-documented by economists. Due to hysteresis effects, extended limbo periods for refugees can lead to the loss or obsolescence of job skills, demotivation and disillusionment. Moreover, unlike unemployment, there is nothing that can be done by refugees to shorten their limbo period, no matter how much effort they exert. The effects may also be worsened for refugees due to a potential skill mismatch, the absence of qualification or skill recognition, informational and cultural asymmetries and psychological traumas.

MEASURING THE QUANTITATIVE EFFECT OF LIMBO

Despite the large body of qualitative literature on the negative impact of the limbo period, there is little evidence on its quantitative impact. We use data from the French longitudinal survey of migrants, ELIPA, surveyed during three waves, which allows us to relay a rich set of integration outcomes and controls (see more details of our study in Havrylchuk and Ukrayinchuk 2016). 13% of surveyed migrants have an official refu-

gee status. During the first wave in 2010, 848 refugees were interviewed (13.9% of the total sample), during the second wave in 2011 this figure was 666 refugees (14%), and during the third wave in 2013 it totalled 471 refugees (13.1%).

ELIPA is the only longitudinal migrant face-to-face survey available in Europe. In the UK, the UK Border Agency commissioned the *Survey of New Refugees* (2005-2009) to provide a longitudinal study of refugee integration in the UK. However, this was a postal questionnaire and one can reasonably assume that it suffered from a selection bias, as only well-integrated refugees have responded. Another drawback is that its time-span is only 21 months after the asylum decision. In 2016, a first issue of the German survey of refugees was organised by the Institute for Employment Research in Nuremberg, but further waves are needed to analyse their integration.

The ELIPA survey allows us to measure the length of residency and the limbo period for up to six months. We know that all of the refugees surveyed received their first residence permit (residence permit of the refugee or residence permit of the family member of the refugee) in the second half of 2009 (between September and December). The surveys took place in the first half (April – June) of 2010, 2011 and 2013. Hence, for refugees not in limbo, the maximum residency length is three and a half years (second half of 2009 – first half of 2013).

ELIPA survey data provides rich information on refugees, including their country of origin, language skills, education, family status and housing conditions. We measure the socio-economic outcomes of integration by relying on questions that appear in all three parts of the survey:

- To measure economic integration, we use information on refugees' employment status. The formulation of the question does not make it possible to distinguish between the legal or illegal nature of this job.
- We measure linguistic integration by relying on the self-declaration of refugees about their ability to speak French, to make an appointment with a doctor via a phone call, to ask for directions on a street, to write an official letter and fill in an administrative form.
- Investment in human capital can be approximated by information on whether a refugee has pursued education, including language courses, in France after his/her arrival.
- Another aspect of social integration can be apprehended with information about origins of new friends acquired since arrival in France (French or same origin as a surveyed refugee).

Identifying the effect of a period of limbo is far from straightforward. While sociological and medical literature portrays only negative aspects of limbo, this time could be and is used by refugees to integrate. Although official language courses are not offered to asylum seekers, numerous associations offer language course

to asylum seekers. Although they have no right to do internships during first nine months, refugees can study during this time and do an internship afterwards. Although they do not have the right to vocational job training, they can do odd jobs, etc. Yet numerous administrative barriers may diminish opportunities for asylum seekers living in limbo compared to those with an official status.

Since we attempt to measure the causal impact of limbo on socio-economic integration, it is important to ensure that the length of limbo is exogenous, in other words that it is not influenced by the characteristics of refugees. Indeed, more educated French-speaking refugees who already have acquaintances in France may have more information at their disposal and be more effective in their communication with authorities, hence speeding up their application process. Moreover, the length of limbo may be related to some unobserved trait of refugees like their motivation to integrate in a host country.

To test our assumption of exogeneity, we regressed the duration of the limbo on different refugee's characteristics. Our findings show that the length of limbo is virtually not correlated to characteristics that could be related to the ability of refugees to integrate (education level, linguistic proficiency and acquaintances in the host country), but is related to characteristics that refugees cannot change (age, nationality, gender). Hence, we conclude that the length of limbo is not correlated with the ability of refugees to integrate.

Figures 5a and 5b report the findings of our analysis of the impact of limbo on the socio-economic integration of male and female refugees. Refugees have different probabilities of being employed, having French friends, investing in human capital or having a good level in French. To understand the impact of limbo (as a % of their total time spent in France) on these probabilities, one has to look at the slope of the probability curves. To illustrate how the mechanism works, let us compare two extreme scenarios. Refugees A and B have lived in France for the same amount of time, but refugee A immediately obtained refugee status (limbo = 0%), while refugee B is still waiting for it (limbo = 100%). Our results show that a probability of having French friends is 96% for refugee A and 86% for refugee B, a 10 percentage point difference. The magnitude of this difference is the same for both male and female refugees.

Our findings suggest that limbo slows down the socioeconomic integration of refugees. The slope is particularly steep for the probability of investing in human capital: the difference between refugee A and B is 31% for women and 44% for men. While the probability of being employed is much higher for men, limbo has a larger impact on them (7%) than on women (4%). Interestingly, limbo has no impact on the probability of having a good command of the French language.

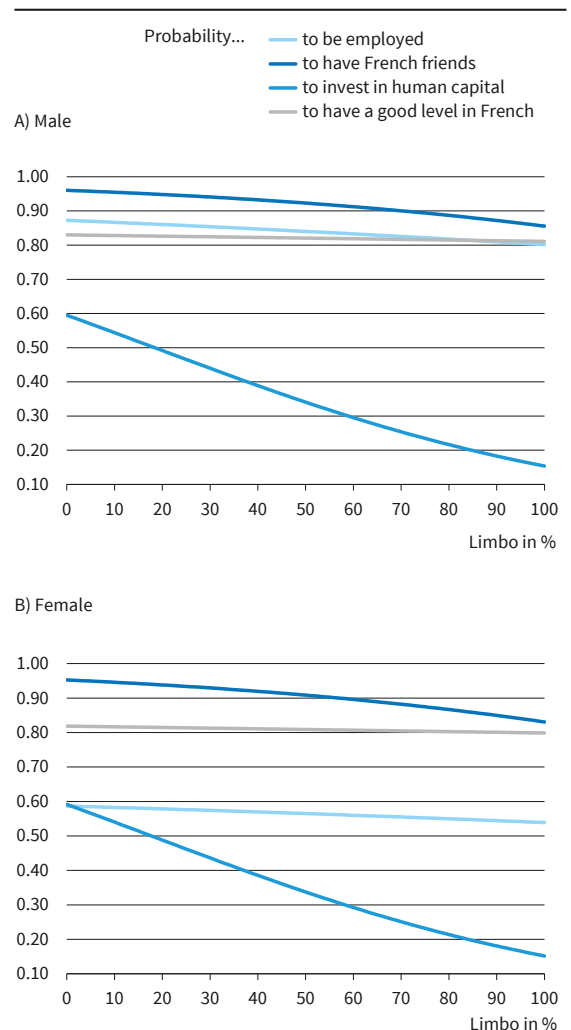
A particularly adverse impact of limbo on the likelihood of finding new friends and studying in France is

worrying, as these two activities are not forbidden for asylum seekers. This might be a sign that administrative barriers impose more lasting social than economic costs due to asylum seekers' demotivation and their loss of dignity, which prevents refugees from reaching out to the natives. These sociological costs are often described in psychological literature on this topic.

Our findings have important policy implications for the immigration policies of host countries. On the one hand, authorities may be willing to shorten the time spent by refugees in limbo, but they lack the financial and human resources to do so. On the other hand, it is often argued that a long limbo period could be designed with an explicit intent of deterrence (Leach and Mansouri 2004). In this second case, the authorities assume that refugees would be unable to integrate and want to prevent their arrival. If limbo has a long-term impact on refugees' human and social capital, the slow integration of refugees could become self-fulfilling.

Figure 5a and 5b

Probability of Socio-Economic Integration



Note: The results should be interpreted for a reference individual, i.e. Sub-Saharan African man/woman, 34 years old, poor French, no diploma, living in Paris, haven't studied in France, with a prospect of permanent stay in France.

Source: Authors' calculation.

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Bastien Chabé-Ferret¹ and Joël Machado² The Impact of Intention to Leave on Immigrants' Behaviour



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Migration policy schemes are increasingly limited in duration and target specific groups of individuals (i.e. in terms of education level, professional categories or experience). Temporary migration schemes in particular are perceived as a flexible way to provide the host country with a workforce that can be adjusted to the prevailing economic conditions. In addition, temporary immigrants' fiscal balance is often considered to be more advantageous for the host country than that of permanent migrants, as remigration before or upon retirement alleviates the issues of old-age dependency. Temporary migration also reduces concerns linked to migrants' integration in the host society.

However, the duration of migrants' stay in a country is unlikely to have a neutral impact on their behavioural decisions. In particular, as individuals base their actions on expectations, temporary and permanent settlement may imply drastically different choices (for a comprehensive review of the literature on temporary migration, see Dustmann and Görlach 2016). Although temporary migration is a phenomenon that is gaining momentum, evidence on the potentially different behaviour of temporary and permanent migrants remains fairly scarce.

In terms of financial investment, the incentives to invest and the returns on projects in origin and host countries can vary with the migrant's intended duration of stay. Several studies have focused on Germany, relying on data from the German Socio Economic Panel. They have found that remigration plans are an important determinant of remittances (Merkle and Zimmermann 1992) and savings (Bauer and Sinning 2011). Furthermore, individuals who change their return intention have also been found to modify their remitting behavior (Dustmann and Mestres 2010). De Arcangelis and Joxhe (2015) use a sample from the British Household Panel Survey in order to analyse saving and remitting behaviour. They find that the total amount saved (including remittances) is 26% higher for temporary migrants than for permanent ones when controlling for the respondent's financial capacities. Using a French survey of individuals around the age of retirement, Wolff (2015) shows that intending to return increases their probability of remitting by over 10 percentage points and almost doubles the amount remit-

ted. Moreover, he uncovers a positive correlation between personal savings and remittances to origin country, and between personal savings and transfers to relatives living in France.

The expected duration of stay in the host country can also affect behavioural choices beyond the purely financial decisions. The investment in the host country's language, often seen as the first step towards a successful integration, is also likely to be affected by the immigrant's planned duration. Dustmann (1999) finds that permanent migrants have a 10% higher probability of being fluent in German than migrants who intend to return.

TEMPORARY VERSUS PERMANENT MIGRATION

In a recent study co-authored with Jackline Wahba (Chabé-Ferret et al. 2016), we analyse the impact of immigrants' intention to leave France on different behavioural choices. The case of France is particularly interesting for at least two reasons. With 7.9 million foreign-born residents hosted as of 1 July 2015 (Eurostat 2017), the country is the third most popular destination for immigrants in the European Union. However, it remains largely understudied because data on migrants in France is still scarce. Secondly, the country's official language is also spoken in several main origin countries of immigrants (for instance, in Morocco, Algeria and Tunisia, as well as in Senegal or Mali).

We rely on the French dataset "Trajectoires et origines" released by INED-INSEE in 2009. This survey was conducted among a representative sample of French metropolitan households of working age between September 2008 and February 2009. In our analysis, we focus on the 9,168 individuals born outside mainland France (i.e. first generation immigrants). The survey provides information on household's migratory background, social, educational and economic environment. It also provides information on several behavioural choices relative to the origin country, including whether the migrant sends remittances, finances a project at origin or participates in the country's political process. Moreover, it includes questions on linguistic progression (i.e. French skills at the moment of arrival and at the moment of the survey) and perception of discrimination.

The survey shows that 15.7% of respondents express a clear desire to leave France while 24.9% respond to the question on intention to leave France with "maybe". In our study, we compare the immigrants who express a clear intention to leave to all the others (i.e. those who answered "maybe", "no" or "don't know", henceforth defined as permanent migrants). Significant differences appear for all the financial, political and linguistic investments between temporary and permanent migrants.

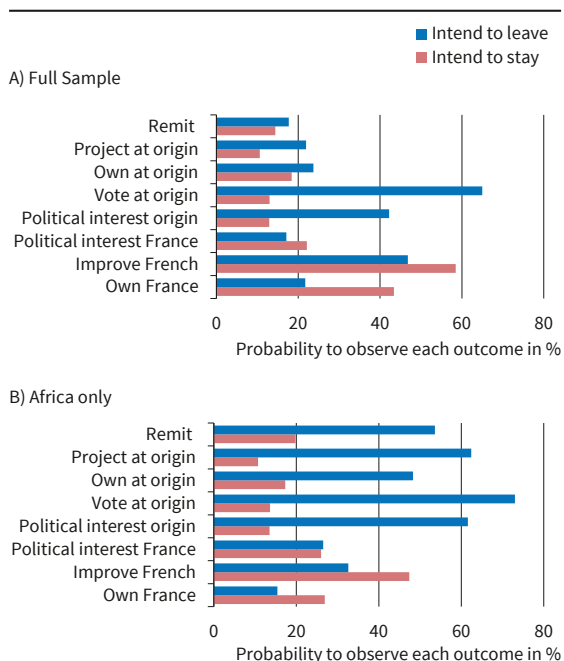
However, individuals who intend to leave France differ from permanent migrants in many observable characteristics. They are usually younger and have

¹ Bastien Chabé-Ferret acknowledges financial support from the FNRS.

² Joël Machado acknowledges financial support from the Fonds National de la Recherche, Luxembourg (9037210).

Figure 1A and 1B

Outcome Incidence Conditional on Intention to Leave



Source: Authors' calculations based on estimations in Chabé-Ferret et al. (2016).

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spent less time in France. They are more likely to be single and less often living with a partner. They tend to have a higher educational degree than permanent migrants and are more concentrated in big agglomerations. They are also less likely to be unemployed or inactive. In our analysis, we control for these observable characteristics in order to ensure that the behavioural differences between permanent and temporary migrants we document can be attributed to their desire to leave, rather than to differences in migrants' characteristics.

An additional issue for the causal interpretation of the impact of remigration intention is that it is a deliberate (i.e. endogenous) choice by the individual. Temporary and permanent migrants may differ systematically in unobservable ways (like their sentimental attachment to their origin country or their willingness to take risks) that could drive both their desire to leave France and the behavioural outcomes we aim to study. Moreover, the intention to leave France may also be the result of a failed integration: an individual may wish to leave France because s/he has not managed to learn French or find suitable employment.

In order to tackle this endogeneity issue we use an instrumental variable strategy. The idea is to use variations in remigration intentions that are due to another variable whose changes are plausibly exogenous (unrelated) to the outcome. For instance, we use the opinion people express about the general level of discrimination in France for the outcomes directed towards the country of origin and migrants' desire to be buried in France for the outcomes in France. In both cases, these

“instrumental variables” provide some variation in the desire to remigrate that should not be connected to the outcomes through any other channel, therefore making it possible to identify a clear causal chain from remigration intention to outcomes.

The first objective of our study is to analyse whether an immigrant's intention to leave France affects his/her behaviour significantly after controlling for both differences in characteristics and accounting for the endogeneity of the remigration intention. The second objective is to analyse whether individuals who invest in their origin country are also more likely to invest in France at the same time; or whether there is a trade-off between different investment decisions.

HOW DOES INTENTION TO REMIGRATE AFFECT INVESTMENT CHOICES AT THE ORIGIN AND DESTINATION COUNTRY?

We analyse eight behavioural outcomes, five of which are directed towards the country of origin: whether the migrants (i) remit, (ii) participate in a project, (iii) own a house (iv) participate in elections and (v) follow politics in their country of origin, while the three others are related to France: whether they (vi) follow politics, (vii) improved their French language skills and (viii) own a house in France. Since the data we use does not provide the amounts invested, our analysis focuses on the probability of exhibiting a given behaviour.

Figure 1A shows the probability for each outcome of happening to two otherwise identical immigrants who differ only in their desire to remigrate, as predicted by their opinion on discrimination in France or their intended burial location. The main finding is that the intention to remigrate tends to positively affect the probability of outcomes directed towards the country of origin and negatively impacts those directed towards France. In particular, migrants stating a desire to remigrate are 11.3 percentage points (pp) more likely to participate in a collective project in their country of origin, but also 52 pp and 29.3 pp more likely to participate in elections or follow politics in their home country. Conversely, they are also 11.7 and 21.7 pp less likely to have improved in French since their arrival and to own a house in France. For the other outcomes, the difference is not statistically distinguishable from zero at the 95% confidence level.

In order to examine whether our results are driven by regional specificities, we focus on migrants from Africa. In addition, Africa represents the main origin region of immigrants in France and a substantial pool for prospective migrants.

Differences documented in the full sample are even stronger for African migrants, as shown in Figure 1B: temporary migrants are 30 to 60 pp more likely to remit, own a house, participate in a project or in elections, or follow politics in their country of origin. They are also 15 pp less likely to have improved in French and 11 pp less likely to own a house in France. Remigration

intentions do not have any significant effect on interest in French politics.

IS THERE A TRADE-OFF BETWEEN DIFFERENT INVESTMENT TYPES?

An additional question that has received rather limited attention is the relationship between immigrants’ different investment decisions. More specifically, is an immigrant who invests in his origin country less likely to invest in France (e.g. owning a house)? In order to address this question, we analyse how intention to return to the home country affects different investment outcomes by simultaneously considering an investment outcome directed at the origin country, as well as at the destination country.

In particular, we focus on ten pairs of outcomes that could, in theory, be complements or substitutes. Firstly, we look at strictly monetary outcomes and examine the relationship between owning a house in France and successively: remitting, participating in a project and owning a house in the country of origin. Secondly, we study the interaction between French language improvement and the same monetary outcomes directed towards the origin country. As French language improvement is not strictly monetary, we also explore its relationship with non-monetary outcomes directed to the country of origin, such as participation in elections or interest in politics. Finally, we examine the trade-off between non-monetary outcomes: interest in politics in France versus participation in elections or interest in politics in the country of origin.

The results displayed in Figure 2A show that for the first eight pairs, remigration intention is positively related to the origin outcome and negatively to the host country outcome. This indicates that temporary migrants tend to shift resources away from the host country, in terms of real estate investment or improvement in French language, towards their home country in the form of remittances, real-estate investment, participation in projects, elections, or interest in politics.

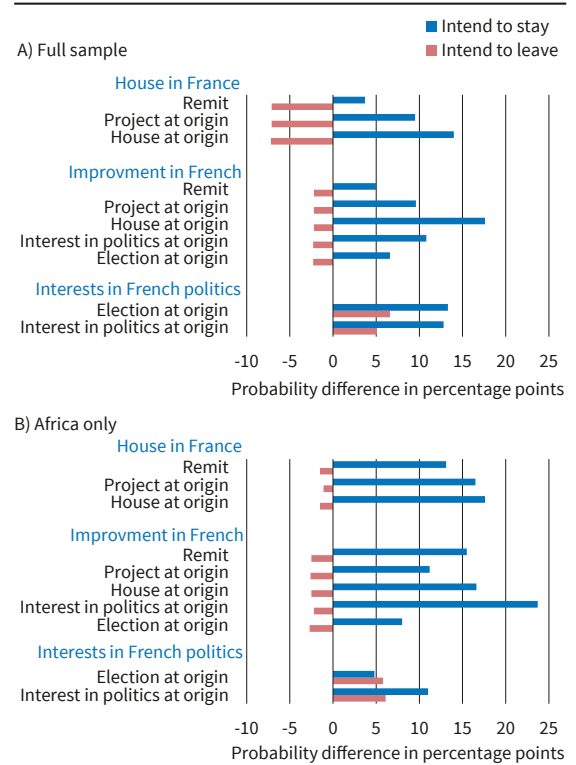
By contrast, we find that interest in politics in France tends to be positively correlated to interest in politics and participation in elections at origin. This suggests that a complementarity exists between those outcomes that drive temporary migrants to get more involved politically in both France and at home. Although statistically weaker, these results remain consistent when we look at migrants from Africa only, as shown in Figure 2B.

CONCLUSION AND DISCUSSION

Using French survey data, we analyse how the intention to leave France affects immigrants’ behaviour. Accounting both for observable differences across temporary and permanent migrants and for the endogeneity of the remigration decision, we find that temporary

Figure 2A and 2B

Effect of Remigration Intention on Outcome Pairs



Source: Authors’ calculations based on estimations in Chabé-Ferret et al. (2016). © ifo Institute

migrants are more likely to invest in their country of origin and less likely to invest in the host country than otherwise similar permanent migrants. We also find that temporary migrants actually tend to shift resources away from the host country to direct them towards the origin country.

As individuals’ expected duration of stay affects their behaviour, immigration policies that define this duration are clearly not neutral to immigrants’ choices. Ideally, we would have liked to analyse how visas of different length randomly allocated to applicants would impact their behaviour. Indeed, a random allocation would address even more convincingly the issue of endogeneity of the remigration decision. This way, migrants in each visa category would have, on average, the same characteristics, both observed and unobserved. The focus would therefore be on the policy instrument, rather than on the migrants’ remigration decision, which certainly depends on the visa type, but also on many other factors that policymakers do not control.

However, if migrants’ expected duration of stay is impacted by the type of residence permit that they possess, our results imply that the latter is also likely to affect immigrants’ choices. Concretely, a permanent residence title could lead to different assimilation behaviour than repeated limited duration visas by reducing immigrants’ uncertainty over their planning horizon. More research, and more detailed data

in particular, is needed to better understand the link between immigrants' behaviour and integration in host societies, return intentions and migration policies. Specifically, more quantitative variables and panel data structures would strongly improve the study of these hotly-debated issues.

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Amelie F. Constant
**The Healthy Immigrant
 Paradox and Health
 Convergence**



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There is no doubt that health is a precious commodity and an indispensable element of human capital. It reflects the quality of the labour force and well-being of people as it is central to economic, socio-political and environmental dimensions of any country. Much like education, health influences earnings via increases in productivity. The productive benefits of health are acknowledged in periods of sustained economic growth and decreasing income inequality, and are at the forefront of the 2030 UN Agenda of Sustainable Development Goals (United Nations 2017).

With millions of people migrating every year, usually from less developed to more developed countries, migrants are everywhere. International migration is now a ubiquitous topic in every country provoking acrimonious debates, usually about jobs. The health status of individuals and particularly of immigrants is the missing statistic in all general statistics, demographics and presentations about the portrait of immigrants and natives, and has not been sufficiently explored.

Populist, anti-migration arguments maintain that migrants move to take advantage of high-quality health-care in developed countries, and they will burden and inevitably bankrupt the health and welfare systems. But besides imposing stringent health screenings to potential migrant arrivals, some host countries ban newly incoming migrants from access to health-care and other benefits. Yet, migrant inflows have not subsided.

The labour economics and demographic studies have been preoccupied with two important questions about the health of immigrants, the answers to which confirm the healthy immigrant paradox (HIP). HIP refers to two phenomena that are diametrically opposed to the earning assimilation literature.¹ First, immigrants have better health than comparable natives when they first arrive in the host country. While health correlates with socioeconomic status, immigrants in the US have better health than their socioeconomic status would predict (Jasso et al. 2004) and score higher in longevity. Second, immigrant health declines with time in the new country and converges to that of natives; sometimes, it may even become worse than the health of natives. HIP is a stylized fact that has

¹ Typically, immigrants have lower wages than comparable natives when they first arrive in the host country, but with additional time in the country their wages increase; they may even reach parity or go above the wages of natives.

been found in many host countries (US, Canada, Australia, Germany, UK) by many studies, albeit with some variations by countries of origin and visa status.

Health is typically measured by self-reported, general-health categories, ranging from poor to excellent. Other more objective health outcomes such as health conditions, medical diagnoses, mobility or activity limitation, prescription drugs as well as weight and obesity have also been used in the literature.

In this contribution we provide insights into the health assimilation of immigrants and the HIP, and demystify perceptions about their bad health. A deeper understanding of immigrant health trajectories and disparities with natives and other immigrants is of great value to societies and policymakers. They can design policy frameworks that promote and safeguard the health of all, cater to the needs of immigrants and address public health challenges.

Culturally tailored measures can prevent the health of immigrants from deteriorating. This contribution is timely and has considerable relevance for public policy, immigration policy, health policy, fiscal policy and education policy.

UNDERSTANDING THE ORIGINAL HEALTH SELECTION

To understand ethnic health disparities when we compare immigrants to natives we need to understand the original health selection of immigrants. An insight comes from the fact that we compare a heavily self-selected group (the immigrants) to a vast sample of nationally representative natives. Therefore, immigrants are bound to be fundamentally different in their health status or other selection criteria than otherwise comparable natives. It is an empirical task to examine whether immigrants are “better” or “worse” than natives with these characteristics.

Immigrants are not a random sample of their home country. They are the ones who choose to undertake the move, while others do not. Thus they differ from the home country population. Unfortunately, we do not have appropriate data about them and their characteristics upon exit to compare them to their compatriots who stay behind in the home country. In theory, they can be of better or worse health than the stayers.

Human capital theory offers some powerful explanations about the selection of international economic migrants. They should be better educated, curious, single, younger, optimistic and in good shape so that they can best benefit from investing in migration. Emigrants should have the fortitude, good physical and mental health in order to be able to withstand leaving their home country, separating from family and friends and going to the often unknown new country. They should be able to endure monetary and unforeseen psychic costs, one being visa stress (Jasso 2013). Thus emigrants are expected to be positively self-selected with respect to their health. Naturally, health selection is

correlated with their education, younger age and differences in the price of skills across countries (Jasso et al. 2004).²

Migration, even under the best circumstances, is a major life event. More often than not, it does not entail a direct flight. Not all prospective immigrants have the wherewithal to make it through the trip, which may take several stopovers in different countries and unforeseen delays. During this migration process, migrants have to overcome many barriers and unpredicted circumstances. It is possible that some may become unable to continue or discouraged and return. Survival of the fittest would then intensify the positive health selection of emigrants and guarantee their arrival in the destination country. The larger the hurdles and barriers migrants have to overcome, the larger the selection will be. The literature provides evidence for these explanations (Jasso et al. 2004).

Health selection criteria imposed by host countries further exacerbate the positive self-selection of the health of potential immigrants. Many visa applications, for example, require a health examination; migrants with tuberculosis, HIV/AIDS, etc. are not granted visas. Migrants can also face additional health screenings at the border of the host country (Zika virus, H1N1, SARS, Ebola, etc.). In contrast, natives do not have to pass any health screening.

In sum, we would expect that immigrants are positively selected with respect to their health, and the average migrant who arrives in the country should have better health than the average native.³

Additional insights suggest that the good health of immigrants stems from nutritional practices in the home countries. Diets are healthier in these countries, containing more fish, fruits and vegetables. Strong cultural norms in some home countries would not allow people to drink or smoke, thus promoting healthy behaviours. Further, they have more active lives and socialize a lot.

SELF-REPORTED HEALTH MEASUREMENTS

A word of caution pertains to potential biases in estimating the self-reported health of newly arrived immigrants. While studies show that the individual is the best judge of their own health, immigrants may under-report their health status for the following reasons: (i) language barriers may prevent them from understanding the health options they should choose or the diseases to report; (ii) cultural beliefs may make them report only very serious illnesses or only some conditions, if they believe that other illnesses are not impor-

tant;⁴ (iii) they may be apprehensive about revealing their health issues in fear that they will be deported or penalized; and (iv) they may actually not know that they suffer from an ailment because they never went to the doctor and were never diagnosed.⁵

On the other hand, it is also possible that they overestimate their health, depending on their reference group. If they compare their health to that of their compatriots left behind, they may feel that they have better health.

AGE, PERIOD AND COHORT EFFECTS IN HEALTH ASSIMILATION

Before we move to the second part of the HIP, that is, immigrant health deteriorates with time in the host country, we discuss some conceptual and measurement issues. Besides genetic predisposition, health is influenced by the environment and correlates with socio-economic status and age. Health is not a static characteristic as is formal education.

Therefore, analyses of health trajectories based on one cross-section cannot reveal lifecycle realities. A snapshot of people's lives cannot disentangle health differences due to the aging process, cohorts or acculturation. Health convergence to natives faces the same problems and biases as the earning assimilation studies.⁶

Age captures the deterioration of health due to physical and biological changes; it indiscriminately affects immigrants and natives alike. Period effects, indicating contemporaneous influences, also affect health. They can be thought of as exogenous shocks or changes that occur in the host country over time and simultaneously affect all age groups. Examples are the recent economic crisis, technological innovations, legislative changes, changes in health care, etc. We assume that period effects affect immigrants and natives similarly.

Cohorts capture the particularities of being born in a certain year or arriving at different years in different patterns. As such, they capture external influences that happened before migration. People who belong to a specific cohort may experience a different process in their aging. For example, a cohort may have been affected by famine or chemical weapons. Furthermore, different cohorts may indicate compositional shifts. Such would be the case of immigrant cohorts arriving with better or worse health than previous cohorts. Antecol and Bedard (2006) found declining initial health

² This paper does not examine refugees, ideological or family migrants nor internal migrants, who can be selected for different characteristics.

³ Immigrants could be negatively self-selected. If, for example, their motive for migration centre upon having health care or high quality health care in the new country, that could indicate that they are most likely less healthy. This can correlate with age, as health declines with age and older people are more concerned about health benefits.

⁴ Mexicans, for example, believe that obesity is not a disease but indicates prestige and affluence. Other cultures believe that type 2 diabetes is the result of distress and deep emotional pain.

⁵ By the same token, the worsening of the immigrants' health with years since migration (YSM) could be partially the result of them having more effective health diagnoses that detect previously undiagnosed and untreated conditions.

⁶ Recall that age, period, and cohort effects are linearly dependent (Age = Period - Cohort). This produces confounding effects in cross-sectional studies, which suffer from biased results.

with each successive immigrant cohort in the US.⁷ Thus, health assimilation models that do not include cohort effects may overestimate the declining health of immigrants over time (Hamilton et al. 2015).

Lastly, the health of immigrants changes with additional years of residence in the new country. Different social and cultural norms, different beliefs and behaviours may create additional psychological distress and are bound to have an influence on the health of immigrants above and beyond the aging factor. To efficiently take advantage of the new environment, immigrants adapt to new behaviours. However, their receptivity varies. At the very least, years-since-migration (YSM) captures the active or passive exposure of immigrants to the new lifestyle.

The age at which the migrant arrived in the host country is very important for their health prospects. The debate centres upon those who arrive as children (less than 12 years old) because their health will be shaped by the host country environment. A study on the maternal health of immigrants in the US (proxied by low birthweight) found that it deteriorates with duration in the US but only when the mothers arrived as children (Teitler et al. 2017). Mothers who arrived as adults saw improvements in their health. The authors speculate that immigrant youth who come to the US with their parents or other adults may not be as favourably selected and may be less driven. Their tender age also makes them more susceptible to negative American influences and health-compromising environments.

THE HEALTH TOLL OF IMMIGRATION

The HIP maintains that immigrants lose their health advantage over natives the longer they stay in the host country. This is at odds with human capital theory, whereby if immigrants invest in health as they invest in other forms of human capital, their health status should improve, or at least not depreciate. At the same time it is at odds with the perception of developed-countries' living conditions, where health care is very good and wages are high.

The factors that contribute to the deterioration of immigrant health are complex, but over the years, scientists have offered some explanations. In this paper we look at first generation immigrants, and thus summarise these arguments.

Some claim that it is the inevitable regression to the mean. Others state that stress from residing in the new country and learning how to cope and adjust can be debilitating. Yet others argue that it is the result of a biased acculturation only to the unhealthy lifestyles of natives – for example, having unhealthy diets high in fat and processed foods, sedentary life, and smoking and

drinking. A segmented assimilation into disadvantaged segments of the native population is also possible, along the lines of the segmented earnings assimilation.

A price effect, as another explanation, is more pronounced among poorer immigrants, meaning that immigrants buy and consume more high-calorie unhealthy foods in the host country because they did not have them or they could not afford them in their home country (chocolate, cookies).

Even when social networks are strong at the beginning, they erode with time in the host country. Immigrants find themselves alone without close relatives or friends, without religious ties and social solidarity. Alienation, social and psychological instability trigger anxiety and depression and undermine good health. Loss of safety nets creates further detrimental effects to their health. On top of that, immigrants have poor language skills that prevent them from expressing themselves and from understanding their rights.

Working hard under stress in strenuous repetitive jobs in assembly lines isolated and without interactions with co-workers adds to the explanations about deteriorating health with years in the host country. Immigrants often also work in risky occupations in construction and meat industries and are regularly exposed to danger and unhealthy conditions.

Exclusion to health services (especially by the newcomers) prevents immigrants from seeking treatment. Even if immigrants have access to health care, and even if health care is 'free', they may not use it. Typically, immigrants come from countries that do not practice preventive care, and they only use health services when there is an emergency. Moreover, across the educational and cultural spectrum, immigrants have different health beliefs and self-care practices than those in the host country.

Lastly, discrimination due to xenophobia, racism and "otherness" experienced by immigrants as a minority and a more vulnerable segment of the population are social stressors that take a toll on their health as well. Being immigrants they face more stressful conditions than natives. Some or all of the above reasons can work together during their residence in the host country and explain most of the deterioration of their health and health disparities with natives.

RETURN SELECTION BIAS

Not all immigrants stay in the destination country forever. Some return to the home country, others move on to other countries, and others may circulate between home and host country. This indicates another self-selection mechanism. Both cross-sectional and longitudinal studies suffer from return selection bias. Theoretical work within the earnings assimilation framework involving several theories (e.g. Neoclassical and the New Economics of Labour Migration) suggests that return migrants can come from the upper or lower end

⁷ Similarly, Hamilton and Hummer (2011) found that earlier cohorts of black immigrants from the Caribbean had better self-reported health than later arrivals. Still, they found that their health declined as their residence in the US increased.

of the socio-economic distribution (Constant and Massey 2002; 2003).

The question is whether the healthier or the less healthy return. Neoclassical theory predicts that the less successful immigrants would return home. As health and socioeconomic status are well-correlated, then those who stay in the host country and whom we measure will have better health. The ‘salmon bias’ theory advocates that immigrants return when they become ill or disabled. Accordingly, health estimates on the remaining healthier immigrants will be an overestimate.

For some immigrants health care availability and access in the home or host country can also influence their decision to return or not. For example, if an immigrant’s health declines and the home country does not have health insurance, they will stay put while the healthy ones might return. This will give an image of immigrants being unhealthy.

Arenas et al. (2015) found direct evidence that migrant health is associated with return migration. Following Mexican immigrants in the US over time and space, the study shows that (i) those who return to Mexico have worse health than those remaining in the US and (ii) those Mexicans with improving health are less likely to return. However, the authors could not corroborate any specific reason or cause for this association.

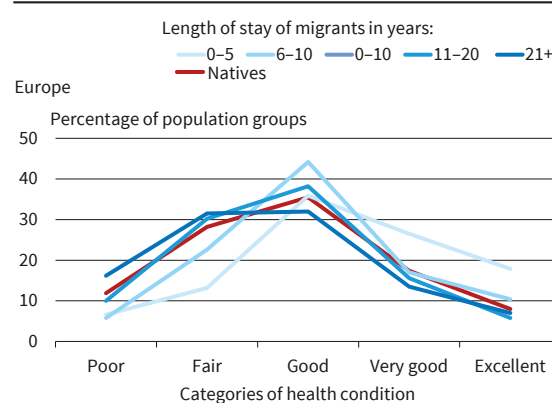
WHAT STUDIES SHOW

Here we provide a small and selective review of recent HIP studies in the U.S. and Europe. In their meta-analysis study examining immigrant health trajectories in the US, Hall and Cuellar (2016) confirm the HIP. Immigrants in the US experience a deterioration of their health over time, and the prevalence of chronic diseases is associated with restrictive health care policies among all groups. Hamilton et al. (2015) study the Hispanic Health Paradox, according to which first generation Hispanic immigrants in the US have a health advantage over their US-born counterparts in the beginning, but while their socio-economic status improves with YSM, their health status declines. The health of the former varies by both arrival cohort and US tenure for immigrants coming from the primary sending countries/regions of Hispanics. The authors find evidence that acculturation plays an important role in determining the health trajectories of Hispanic immigrants.

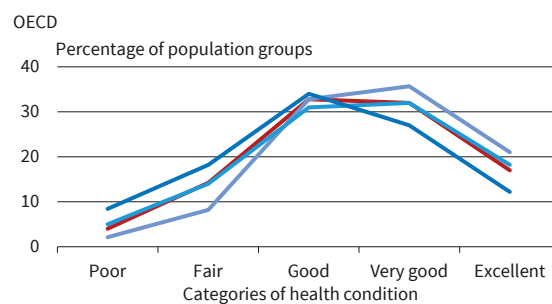
Studies in Europe use the Survey of Health, Aging and Retirement in Europe (SHARE), which is representative of all regions in Europe and includes 19 host countries. Immigrants to Europe come from more than one hundred different countries, some are third-country nationals and some are EU citizens. Pooling together all four cross-sections currently available (2004/05, 2006/07, 2010/12 and 2013), Constant et al. (2017a) provide evidence that immigrants to Europe exhibit a HIP.

Figure 1

Health Disparities by Nativity and Years-Since-Migration



Note: 5,326 immigrants and 63,118 natives over the age of 50.



Note: 7,820 immigrants and 126,466 natives aged 16–65; 45% have 0–10 YSM, 25.8% have 11–20 YSM, and 29.2% have 21+ YSM (Constant et al. 2015).

Source: Author's calculations based on SHARE and PIAAC data. © ifo Institute

Figure 1 illustrates the self-reported health of natives and immigrants by YSM and health categories from raw data. While each ethnic group exhibits a normal health profile compared to natives (red line), new-coming immigrants (light blue line) are healthier. This is evidenced by their larger fraction in the ‘very good’ and ‘excellent’ categories and by their smaller fraction in the ‘poor’ and ‘fair’ categories. With additional YSM, the health of immigrants changes and approaches that of natives. Immigrants with more than 21 YSM (dark blue line) have the worst health. Clear health disparities exist between immigrants, with newcomers having better health and longer residence immigrants having worse health.

A multilevel regression analysis with age-period-cohort effects, demographics, socio-economic and other controls confirms the HIP. At the beginning (up to five YSM), immigrants have a health advantage over comparable natives, but this advantage disappears quickly with additional YSM so that immigrants and natives are not significantly different. Looking at the immigrant health trajectories and comparing longer-term, established immigrants to those newly arrived (zero to five YSM), the study finds a significant deterioration in their health status with YSM (Constant et al. 2017a).

The Programme for the International Assessment of Adult Competencies (PIAAC) dataset (2011/12) repre-

senting 22 OECD host countries and individuals aged 16 to 65 provides a similar picture. While all groups (natives, immigrants with 0 to 10 YSM, 11 to 20 YSM, and more than 20) exhibit a normal distribution in their health status, there are clear differences among the groups. The newly arrived immigrants with up to 10 YSM differ from natives the most. Not only fewer of them are in the ‘poor’ or ‘fair’ categories, but many more of them are in the ‘very good’ and ‘excellent’ categories, indicating better health during their first years after arrival.

With longer time in the host country, their health status almost converges to that of natives (middle blue line). Interestingly, after twenty years, fewer immigrants than natives report ‘very good’ or ‘excellent’ health and more immigrants report ‘poor’ or ‘fair’ health (dark blue line). This describes a worsening of immigrant health compared to natives. It also shows that health deteriorates with YSM even among immigrants.

EXCEPTIONS TO THE HIP

Host country policies and institutions can shape the characteristics of potential immigrants and dictate who is welcomed. If a country does not impose health screenings, it might attract more migrants with health conditions. Israel serves as an excellent paradigm in this respect. It has an open door policy to all migrants of Jewish descent and does not refuse their entry even when they are sick with communicative diseases. In fact, the government has often airlifted Jewish people from other countries, thus also eliminating their travel costs. Upon arrival, the country takes care of their health and provides them free health care, housing, schooling, etc.

Constant et al. (2017b) used SHARE data that include Israel to test the HIP. The authors find that immigrants who go to Israel have compromised health and are significantly less healthy than comparable natives when they first arrive and up to ten YSM. Their lower health status persists for two decades after their arrival. Convergence with natives occurs only after 21 YSM. This result is robust under more objective health measures such as the weekly consumption of prescribed drugs. The authors explain the Israeli “sick immigrant effect” via negative self-selection and open borders. Immigrants to Israel are not typical international economic migrants. They are driven by ideological reasons and religiosity to go to Israel. As such, their migration also entails very low psychic costs.

Studying the Irish immigrants in England in the 20th century, Delaney et al. (2013) look at both health and psychological well-being. Their data allow them to compare the cohorts of Irish who went to England to those of their compatriots who did not migrate. They find that the immigrants were negatively self-selected with respect to their health that is, they had worse health than the Irish in Ireland. They also had high rates

of psychological distress that were mostly related to pre-migration conditions of mental and sexual abuse as children. The Irish were less healthy than comparable English natives in England. These results are the opposite of the HIP.

In the US, Mehta and Elo (2012) compared immigrants from the Former Soviet Union (FSU) to US-born whites aged 50 to 84. These immigrants, while highly educated, reported considerably higher disability than natives, but also lower levels of smoking, and heavy alcohol use. Validating the healthy selection hypothesis, the authors find that those who emigrated from FSU during the 1970s and 1980s, when exit was very difficult, had less disability than those who emigrated during the 1990s and 2000s from the free Russia. Finally, comparing Russian immigrants to the US to their compatriots who reside in Russia, the authors find that the former have lower levels of disability than the latter, thus, they were positively selected for health.

CONCLUDING REMARKS

In most developed host countries, migration policies are drafted so that only the healthy migrants can enter. Major concerns are that immigrants who arrive sick can contaminate the natives. This can damage the public health system. Moreover, if immigrants are not healthy they will not be able to work and will have to live off of welfare, which will also drain the public coffers. However, there is no mechanism in place to ensure the good health of immigrants while they become members of the society and live in the country.

This contribution showed that in the majority of cases, immigrants are positively self-selected from their country of origin and have better health than natives when they first arrive in the host country. However, their health advantage erodes with additional time in the host country and immigrants “negatively” assimilate to natives’ health. This is called the Healthy Immigrant Paradox (HIP). Studies also find that health disparities exist among immigrants as well, with newcomers having better health than immigrants living in the host country for a long time.

Effective policies should intervene in the health of immigrants before they develop chronic problems (usually after six or ten YSM). Yet, the US, the UK and other host countries specifically exclude these groups from health-care and other benefits. The good health of immigrants is beneficial for the wealth and future of the host country. If immigrants are expected to positively contribute to the economic and social aspects of the host country, maintaining a good health status is necessary.

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Henrik Andersson, Heléne Berg and
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Native Migration Responses to Increased Immigration

INTRODUCTION



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and CESifo.

Immigration has long been a topic high on the political and academic agenda. At the EU-level, the recent political debate has focused on how to accommodate arriving refugees and the recent failed attempts to establish a functioning European mechanism for a more even spatial distribution of new arrivals. At the national level, there is a longstanding debate over the effects of immigration on the host country, be it labour market effects, fiscal effects, welfare effects, effects on long-term growth, or effects on natives' migration behaviour. The last question is important for both European and national political debates.

In this article we ask: do natives change their internal migration behaviour when exposed to increasing immigration? Our case study is Sweden. Sweden has, relative to other European countries, high levels of refugee immigration, stretching back over three decades. Over the last seven decades, there has been an increase in the number of immigrants to Sweden, as well as a change in the immigrants' source region. This is highlighted in Figure 1. In the mid 1900's, the foreign born population made up less than 3% of the Swedish population, and largely originated from the Nordic countries. This pattern has since changed, with an initial increase in labour market immigration from non-Nordic European countries in the 1960s and 1970s, which was followed by non-European refugee- and family-related immigration, especially from the early 1980s onward. The foreign born population in Sweden now constitutes over 16% of the population, with the majority of foreigners having been born outside Europe. With such a significant change in population characteristics, questions emerge as to how the host country is affected.

POTENTIAL MECHANISMS FOR NATIVES' MIGRATION RESPONSES

In the migration literature, researchers usually differentiate between the concepts of *white flight* and *white avoid-*

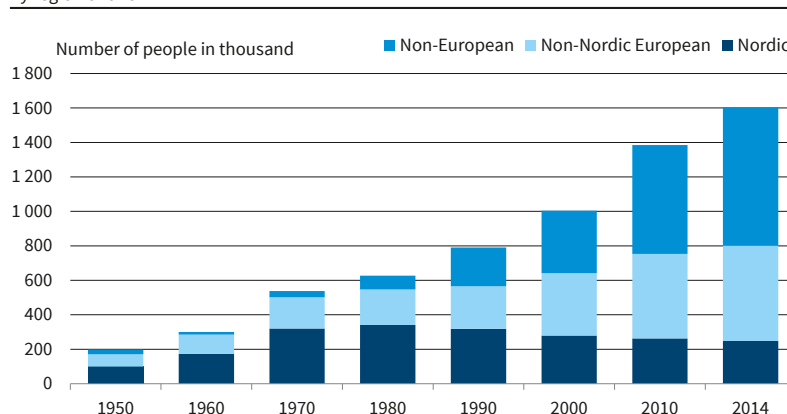
ance (or similarly, native flight and native avoidance). The former describes when natives move *out of* a neighbourhood due to the increased presence of immigrants, while the latter implies that increased immigration causes natives to avoid moving *into* neighbourhoods.

While it is possible to have native avoidance, but not native flight, as well as vice-versa, the mechanisms driving the migration response are likely to be similar. Firstly, natives may have preferences for neighbours with a shared ethnicity or racial background (see, for example, Farley et al. 1978, Farley et al. 1994, and Card et al. 2008). Secondly, natives might expect or perceive incoming refugees as having lower levels of education and income, as well as a poorer overall socio-economic status. If natives prefer to live with individuals who are similar in these aspects, the flight phenomenon is perhaps better described as economic, rather than native, flight. As we will see, effects due to economic or ethnic preferences are inherently difficult to separate from each other.¹ Thirdly, parents might choose where to live based on where the (perceived) best schools are (see, for example, Betts and Fairlie, 2003, for a discussion of how immigration can be perceived to affect school outcomes). This mechanism, however, is most likely of secondary order in Sweden, where a voucher system also allows parents to choose schools in neighbourhoods other than their residential location. Aside from these three behavioural mechanisms, immigration inflows may also affect the housing market. If higher immigration changes house prices, natives may react to these changes rather than to the immigrants per se (see, for example, the model in Boustan 2010). Furthermore, to the extent that the housing supply is fixed in the short run, each individual moving into a neighbourhood means that there is one less spot for everyone else. While we expect price mechanisms to be of little importance since most immigrants occupy rental housing,

¹ It is worth noting that in the classic paper by Thomas Schelling (1971), segregation can be based on any characteristics that individuals find important to sort on.

Figure 1

Foreign-Born in Sweden 1950–2014
By region of birth



Source: Blind and Dahlberg (2015).

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which is regulated in Sweden, this latter “mechanical” effect is important for the interpretation of the results.²

WHAT DOES THE EXISTING LITERATURE SAY?

In the US, researchers have investigated the question of *white* flight for a long time. Generally, US data differ somewhat from European data, and instead of asking if natives move out of neighbourhoods due to increased immigration, US surveys often ask if the white population migrated due to black immigration. Notable research here includes Boustan (2010), who studies the effect of black migration into northern cities from 1940 to 1970, and how this affected the white population living in cities. Careful estimations find that for every black migrant, 2.7 white individuals left.

For results based on European data, Rathelot and Safi (2014) find indications of native avoidance in their study of France, but not native flight. Using data from the UK, Sá (2015) shows evidence that the growth in the native population is significantly smaller in areas with higher immigration. When studying the development over time in four neighbourhoods in three Swedish cities, Bråmås (2006) finds signs of native avoidance, but not native flight.

A related body of literature makes use of an argument put forward by Thomas Schelling (1971), whereby flight is not a linear process. Instead, natives start to leave after a certain tipping point, after which the individual with the strongest preferences for homogeneity leaves, triggering a chain of events that could lead to full segregation. Card et al. (2008) formalised this way of thinking empirically, finding tipping points in the US at around 8–12% of minorities.³ Likewise, Aldén et al. (2015) conclude that they have found significant tipping points when using Swedish data.

Another body of literature within economics has studied the labour displacement effects of natives due to increased immigration. This literature concerns the effect of immigration on native wages and employment. Most papers find minor or no effects.⁴

DATA AND METHOD FOR THE CASE OF SWEDEN

Our Swedish study (Andersson et al. 2017) aims to isolate the effect of foreign immigration on the migration behaviour of natives from other factors that may simultaneously drive the two. In other words, we aim to estimate the causal effect of immigration on native migration.⁵ To this end, we make use of a very comprehensive database called GeoSweden. The database includes

yearly anonymised individual information on all residents in Sweden with permanent addresses, starting in 1990 and ending in 2014. It has information on demographic and socio-economic characteristics such as age, gender, marriage, country of birth, labour market status, education and income. It also includes information on type of residence and parents’ foreign background that will prove important to gaining a deeper understanding of the internal migration process.

The database also holds detailed information on immigrants such as their country of origin and the reason for their immigration. This constitutes an interesting tool that has not been available in previous studies as it enables us to separate refugees from labour migrants and other types of immigration. From a methodological point of view, this separation is valuable because refugee migrants tend to be less selective about where they locate. Another crucial feature of the data is that it provides individuals’ place of residence on a highly differentiated basis, which means that we can define “neighbourhoods” to and from which people migrate as quite small geographical units.⁶ This, we argue, is an advantage compared to previous literature, which frequently uses larger geographical units (such as MSAs in the US).⁷

Thanks to this data, we can apply a research design that is an improvement on existing work in terms of capturing the causal effect of immigration. The design is a type of regression analysis labelled as a “shift-share strategy” (Altonji and Card 1991; Card and DiNardo 2000), but fine-tuned in several ways. In general, the idea with the shift-share strategy is to use the fact that new immigrants tend to be drawn to places where their predecessors have previously settled. Our first improvement lies in the fact that our measure of previous immigrant settlement is constructed from a refugee placement programme that disallowed refugee immigrants to select their place of residency in the 1990s. Other improvements are possible thanks to the comprehensive data as described above.

SAMPLE DESCRIPTION

Table 1 and 2 describe our data sample, which covers the period 1997–2010 (we also use data for the years 1990–1993 to measure refugee settlement during years of the placement programme). Table 1 presents the mean and standard deviation for the main variables. On average, just less than one immigrant per year moved into a given neighbourhood, but the standard deviation is much larger than that, reflecting the fact that many neighbourhoods differ from the average. In particular, our neighbourhoods are generally small, and a substantial share (over 80%) received no immigrants at all. The neighbourhood population is on average around

² See Andersson et al. (2017) for a lengthier discussion of potential mechanisms driving the native migration response.

³ Easterly (2009) does however not find any signs of a tipping point in the US.

⁴ This body of literature is very large and cannot easily be captured here. A few interesting examples include Card (1990), Peri and Sparber (2009) and more recently Dustmann et al. (2017).

⁵ Our main definition of a native is a person born in Sweden. However, in a sub-group analysis we separate these natives based on where their parents are born; see the result section below.

⁶ In particular, we define a neighbourhood as a so-called Small Area for Market Statistics, SAMS.

⁷ Immigration into a certain neighbourhood in a larger city may go largely unnoticed by natives who live in another neighbourhood within the same city borders.

Table 1

Descriptive Statistics for Main Variables

Variable	Obs.	Mean	Std. Dev.	Min	Max
Outflow	114,477	85.2	118	0	2352
Inflow	114,470	85.2	121	0	2716
Immigration	114,478	0.82	4.7	0	313
Population	114,478	1,019	1,236	1	20,285

Source: GeoSweden (2017).

1,000, but this figure ranges from as low as 1 to as high as 20,000. As for the native population, 85 individuals on average move out of or into a neighbourhood in a given year. In terms of turnover, around 10 % of the natives in a typical neighbourhood are exchanged in any given year.

Our sample includes refugee migration from over 30 countries, which represents the majority of refugee immigration to Sweden during our time period. Table 2 lists the most dominant sources of immigration – the seven source countries in the table account for as much as 85% of all refugee immigration in our sample. It is worth noting that a very large share of the sample consists of Iraqis, which is largely due to the Iraqi war.

DISCUSSION OF RESULTS

In Andersson et al. (2017) we study how native migration responds within a one-year-period following increased immigration. Two main conclusions can be drawn from this analysis; firstly, we find no significant overall effects of immigration into a neighbourhood on native migration patterns, neither statistically nor economically. This conclusion holds regardless of the measure of native migration used; out-migration (flight), in-migration (avoidance), or total changes in the native population. Interestingly, this result contradicts the earlier migration literature (e.g., Boustan 2010; Rathelot and Safi 2014; Sà 2015; Bråmås 2006). There are several possible reasons for this discrepancy, such as different time periods and/or time spans during which immigration and the following native migration response is measured, different data sets and different

Table 2

Countries of Origin for Majority of Refugee Immigrants (in Sample) to Sweden 1997–2009

Countries	Frequency	Share of sample (%)
Iraq	40,537	43
Somalia	11,597	12
Serbia/Montenegro/Kosovo	8,345	9
Bosnia	6,727	7
Iran	5,105	5
Afghanistan	4,347	5
Syria	3,954	4

Source: GeoSweden (2017).

definitions of “immigrants” and “natives”. Lastly, an important explanation could be the refined, more reliable estimation method in Andersson et al. (2017).⁸

Our second main conclusion is that migration processes and how they respond to increased immigration are complex matters. More specifically, the null effect we find on average masks interesting subgroup patterns, which can only be revealed thanks to the richness of our data. An example of an aspect that, due to unavailable data, has been neglected in previous literature, but that seems important to understanding migratory behaviour is type of residence and the option of moving that accompanies it. In particular, we detect significant flight among natives in owner-occupied housing and condominiums, who are likely to be more mobile than those staying in rental-controlled municipal housing.⁹ Another interesting dimension that has previously been mostly overlooked is the “degree of foreign background”. There is no clear definition of a “native”, and our analysis shows that those defined more broadly as natives – namely, those who are themselves born in Sweden, but have foreign-born parents (sometimes referred to as “second-generation immigrants”) – seem to react at least as strongly to increased immigration as native-born individuals whose parents are also born in Sweden. In particular, they seem to move out of neighborhoods with larger immigration in the same pace as native-born individuals whose parents are also born in Sweden.

Because immigrants on average tend to have lower income and education, disentangling residential preferences along ethnic versus socio-economic dimensions is intrinsically difficult. But at the very least, our combined sub-group analysis indicates that the latter cannot be neglected. More in-depth analysis of how natives with both parents born in Sweden and “second-generation immigrants” respond to increased immigration is required to better understand what drives residential preferences.

The analysis in Andersson et al. (2017) takes a one-year perspective, but decisions to move sometimes take longer than that. Although many factors poten-

⁸ This first conclusion also does not rhyme well with some of the results from the related – yet different in nature – studies of ethnically driven tipping points (e.g., Card et al. 2008, and Aldén et al. 2015).

⁹ This is tightly linked to the fact that many living in public rental apartments belong to lower income groups, who might not have many options outside the public rental housing market. Furthermore, housing queues in several municipalities are long, making mobility limited in practice.

tially change in the long run, making it difficult to isolate the effects of immigration, looking into more long-term migratory responses is an interesting task for future studies. Another potential research avenue would be to examine whether school choice among natives who stay in increasingly immigrant-dense neighbourhoods results in segregated schools. This is the next step on our agenda.

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Sandra Sequeira, Nathan Nunn and Nancy Qian

Migrants and the Making of America: The Short- and Long-Run Effects of Immigration During the Age of Mass Migration



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“Between 1880 and 1920 America became the industrial and agricultural giant of the world... This could not have been done without the hard labour, the technical skills and entrepreneurial ability of the 23.5 million people who came to America in this period.”

John F. Kennedy

The current American political discourse is heavily centred around the impact that immigrants have on the communities into which they settle. While this topic has received significant attention to date, most of the focus has been on the short-term effects of immigrants. And yet, an equally important question is the long-run impact immigrants can have in the locations into which they settle, particularly since the short- and long-term impacts may be different.

We contribute to the study of the impact of immigration by taking a historical perspective. In particular, we examine migration into the United States between 1850 and 1920 – during America’s Age of Mass Migration – and estimate the causal impact of immigrants on economic and social outcomes today, approximately 100 years later. This immigration period is important for several reasons. First, it was the largest in the history of the United States. Second, the wave of “new” immigrants that arrived during this period was not just an extension of the previous waves of immigrants. Earlier immigrants were primarily of French, Irish and English origin, but the new wave also included immigrants from southern, northern, and Eastern Europe who spoke different languages and had different religious practices.

Empirically studying the long-run impacts of immigration poses several challenges. A simple comparison of counties with and without historical immigration can be misleading since there could be omitted factors, such as geographic or climatic characteristics, that may have affected whether immigrants settled in a particular location. These characteristics may then have independently had an impact on the outcomes of interest. If we observe that counties with more historical migration are richer today, it might have been that migrants were attracted to locations with more growth potential. These areas would have grown faster, even in the absence of the migrants. If we observe that coun-

ties with more historical migration are poorer today, it might have been that migrants were only able to settle in more marginal locations, with poorer future economic growth, where land and rents were cheaper. In fact, the historical evidence seems to point in this direction. There are substantial historical accounts of congestion, legislation and discrimination keeping migrants from well-paying attractive jobs and occupations. This may have induced immigrants to settle in neighbourhoods and counties with lower future growth potential. For example, legislation in the mid-1890s in both New York and Pennsylvania excluded all foreign aliens from jobs in state and local municipal public works (Muller 1993). Legislation from Pennsylvania required residence and language requirements for foreign-born, while in Idaho legislation prevented companies from hiring aliens who had not declared their intention to stay permanently in the United States (Handlin 1948; McGouldrick and Tannen 1977, Hannon 1982).

To overcome this challenge, we exploit two facts about immigration during the Age of Mass Migration in our analysis. The first important fact is that after arriving into the United States, immigrants tended to use the newly constructed railway to travel inland to their eventual place of residence. Therefore, the timing of a county’s connection to the railway network affected the number of immigrants that settled in the county. The second fact is that the total inflow of immigrants fluctuated greatly during this period (see Figure 1). This means that in some decades, immigration was significantly higher than average (e.g., 1850s, 1880s, and 1900s) while in other decades it was significantly lower than average (e.g., 1860s, 1870s, and 1890s).

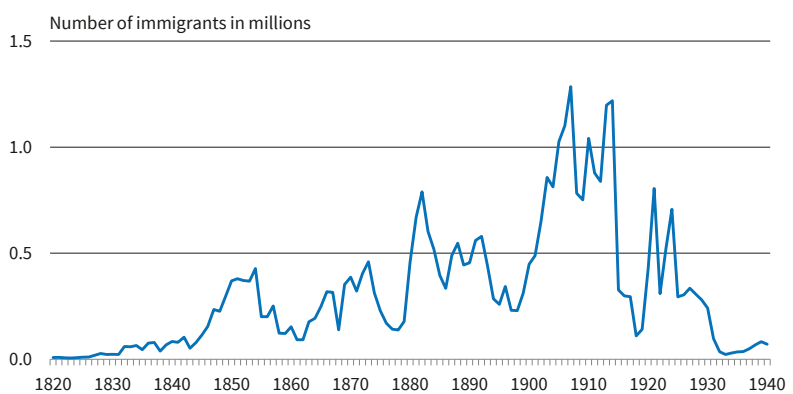
If a county was connected during periods of high immigration then it would tend to have more immigrant settlement. During this time, once a county became connected to the railway network it almost always stayed connected. Our analysis therefore compares counties that became connected at approximately the same point in time, but some counties were connected just prior to an immigration boom and others just prior to an immigration lull, and thus ended up with higher and lower levels of immigration respectively.

Our estimates suggest that immigration, measured as the average share of migrants in the population between 1860 and 1920, generated significant economic benefits today. It resulted in higher incomes, less poverty, less unemployment, more urbanization, and higher educational attainment. Moving a county with no historical immigration to the 50th percentile of our sample of counties results in a 20% increase in average per capita income today, a 3% decrease in unemployment and a 3% decrease in the share of the population living in poverty. We also identify a 31% increase in the rate of urbanization and an increase in 0.6 additional years of schooling.

One important concern with our analysis is that the long-term economic benefits of immigration may

Figure 1

Annual Flow of Immigrants to the United States, 1820–1940



Source: Migration Policy Institute.

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have come at a high social cost, such as the erosion of social cohesion, civic mindedness or an increase in crime. However, we find no such effects. Historical immigration does not appear to be associated with any changes in long-term social outcomes.

We then examine the potential mechanisms that underlie our findings. It is possible that the long-term economic benefits that we estimate arise due to the relocation, as opposed to creation, of economic prosperity. In practice, this requires understanding how immigration into a county might have affected economic outcomes in neighbouring counties or in other counties within the same state. To test this hypothesis, we examine whether being close to a county with more historical immigration resulted in less long-term economic development today. We would expect such a relationship to be present if immigration caused economic activity to relocate to counties with more immigrants at the expense of nearby counties. We find no evidence of immigration into a county resulting in a decline in long-run economic prosperity in nearby counties. If anything, our estimates suggest that historical migration into one county may have had a positive effect in neighbouring counties.

We also consider the possibility that the effects we estimate are due to the impact of historical immigration on current levels of immigration. The evidence, however, weights against this hypothesis. While historical immigration from 1860 to 1920 is associated with a greater share of foreign-born within the population immediately after the Age of Mass Migration, this relationship faded over time, and by 1950 it had disappeared. This suggests that the positive effects we observe today on the economy are unlikely to be driven by contemporary immigration.

In our study, we also examine when the impact of immigration began to be felt. It is possible that in the short-run immigrants imposed costs in the economy and that the benefits they brought were only felt in the

medium- or long-run. The immigration backlash and the rise of social and political nativist movements at the time suggest that there may have been immediate costs to immigration. However, we find that the benefits of immigration may have been felt immediately. During the early stages of industrial development, immigration appears to have provided a large supply of labour that was necessary for the take-off of industry and for sustained modern economic growth. In fact, several historians have documented that immigrants were disproportionately represented in the

industrial workforce (Engerman and Sokoloff 2000, Alexander 2007). For example, in 1880, despite only accounting for approximately 10% of the total population, immigrants already accounted for 57% of the manufacturing workforce. From the commercial trades of the Genoese Italians to the abilities of the Eastern European Jews and Armenians, immigrants brought with them different sets of experiences and skills that allowed them to specialize in particular occupations. Consistent with these historical accounts, our analysis shows that the presence of immigrants caused a large and significant increase in manufacturing output both during the Age of Mass Migration (1860-1920) and immediately afterwards (1930). According to the magnitude of the estimated effects, moving a county with no historical immigration to the 50th percentile (an increase of 0.049) led to a 49% increase in average manufacturing output per capita from 1860-1920 and a 57% increase in 1930.

Immigrants also contributed to productivity improvements within agriculture, bringing with them knowledge about new agricultural techniques. Immigrants represented a small but important proportion of farm operators (15.3% in 1900 and 10.5% in 1920), with the vast majority of these being owner-operators (80% in 1920). We find that moving a county with no historical immigration to the 50th percentile of the distribution is associated with a 39-58% increase in 1930 farm values. However, these benefits were felt primarily just after the end of the Age of Mass Migration.

We then turn to the possibility that immigrants may have led to a greater stock of technology and human capital. We find that counties with a higher share of immigrants actually had lower enrolment rates during the period 1870-1920. We obtain a similar finding if we instead look at the average share of the total population that was literate. We find that immigration is associated with lower rates of literacy. Our finding that immigration resulted in less education in the

short-run is consistent with the fact that immigrants tended to be less educated than native-born populations, particularly towards the end of the Age of Mass Migration. The negative historical association between immigration and educational attainment could arise, in part, from the positive economic effects of immigration, which increased the opportunity cost of schooling (Atkin 2017). Our results suggest however that there was a reversal of the effects of immigration on education. In the short-run, immigrants reduced average education, while in the long-run they increased it. There are several possible explanations for this. First, it may be that the effects arise due to the long-run effect of immigrants on income, and the fact that today higher incomes are associated with more education. Other explanations have been suggested in the literature such as the fact that the presence of migrants might have led native workers to pursue less manual-intensive occupations and to obtain more schooling (Foged and Peri 2015). The reversal on educational outcomes could also have been due, in part, to higher investments in compulsory education in counties with a higher share of immigrants under the belief that exposure to American public schools would instil the desired American civic values (Bandiera et al. 2015). A final potential explanation is that although immigrants were (on average) less skilled than the native population, they may have had values and aspirational beliefs that facilitated the rapid accumulation of education among their children and/or future generations of children in their communities. This is consistent with the fact that the children of immigrants tended to be more educated than the children of natives.

Another mechanism through which immigrants could have affected early economic development is through innovation and knowledge creation. Although most immigrants were unskilled, an important subset of immigrants were highly skilled and important innovators. There are many examples of immigrants, who were involved in early industrialisation in Europe, bringing over more advanced European technologies to the United States (Rosenberg 1972). It has also been argued that the increased availability of unskilled labour due to immigration facilitated the introduction of technological and managerial innovations, such as assembly lines and the rise of the managerial firm (Abramovitz and David 2000, Chandler 1977, Denison 1974, Hirschman and Mogford 2009). Others have argued that the increase in the labour force enabled economies of scale in production, leading to increased profits that spurred innovation. To examine the impact of immigrants on innovative activity we analyse patenting rates during the Age of Mass Migration. We find a positive and significant effect of immigration on innovation during this time. An increase in historical immigration from zero to the 50th percentile (0.049) results in a 0.7% increase in the number of patents per capita. To assess the extent to which this increase in innovation is due to immigrants innovating themselves or due to

their facilitating innovation by native-born Americans, we attempt to identify the country of birth of the innovators in the patent applications. The main challenge is that the citizenship of patent applicants was not consistently reported prior to 1880. Consequently, we are only able to identify the citizenship of the patent applicant in 50% of our sample of 1,297,086 patent applications. Moreover, the Naturalization Act of 1798 enabled immigrants to become United States citizens after only fourteen years of residence in the country. Therefore, it is possible that several patent applicants are registered as US citizens despite being foreign-born. Another concern is that there were significant challenges and costs associated with obtaining a patent, which might have placed recently-landed foreigners with a limited understanding of English at a disadvantage. With these caveats in mind, we estimate the effect of immigration on the rate of patenting by inventors that reported themselves as being foreign-born. We find a positive and statistically significant effect of immigration on foreign patents. However, the magnitude of this effect is much smaller than the impact on total patents. According to the estimates, an increase in historical immigration from zero to the 50th percentile (0.049) results in an increase in foreign patenting by 0.01%. This suggests that the direct effect of immigrants on foreign patents was lower than the indirect effect of immigrants on innovation by native-born inventors. The presence of European migrants had a significant effect on the rate of innovation of US-born inventors.

A closer analysis of the types of patents that tended to be registered by European-born inventors suggests that while they were fewer in number, it is possible that many of these patents represented contributions that were particularly important for industrialisation. The importance of their contribution can be inferred by the relative citation rates of the patents (NBER Patent Citation Database). Of the patents in our sample, 16% of the patents continue to be cited in recent decades. While European patents registered by European applicants may have been small in number, they may have been disproportionately influential.

It has also been noted that immigrants contributed directly to the productivity of the United States economy through important technological innovations. One example of such an innovation is the suspension bridge by John A. Roebling, a German-born and trained civil engineer. He built numerous suspension bridges, his most noteworthy being the Niagara Falls Suspension Bridge and the Brooklyn Bridge. Other notable engineers include: Charles Conrad Schneider (born in Saxony), who constructed the famous cantilever bridge across the Niagara River in 1883; Austrian Gustav Lindenthal, who built the Hell Gate Bridge; and John F. O'Rourke, an Irish engineer, who built seven of the tunnels under the East and Hudson Rivers, and six of the tunnels of the New York subway systems. Another example is Alexander Graham Bell, who was born in Scotland in 1847 and moved to Boston in 1871. In 1876,

Bell developed an acoustic telegraph that could transmit voices and sounds telegraphically, and within a year, the Bell Telephone Company was established. Other notable inventors include: David Thomas (Welsh), who invented the hot blast furnace; John Ericsson (Swedish), who invented the ironclad ship and the screw propeller; Conrad Hubert (Russian), who invented the electric flashlight, and Ottmar Mergenthaler (German), who invented the linotype machine.

Immigrants also contributed to business innovation. For example, the historical literature shows that among individuals born from 1816-1850, immigrants are disproportionately represented among the top businessmen in the United States. Immigrants also made important contributions to the educational system of the United States (Faust 1916). For example, the concept of kindergarten was brought to the United States by a German immigrant. Ager et al. (2016) show that not only did kindergartens increase education and incomes of children, but they also had a negative impact on fertility.

These findings are consistent with arguments commonly made in the historical literature that suggest that immigrants benefitted the economy by providing an ample supply of unskilled labour, which was crucial for early industrialization. Immigrants also resulted in a small but potentially important supply of skilled individuals, who provided knowledge, know-how, skills and innovations which were economically beneficial and particularly important for industrial development.

Our paper also attempts to connect the short- and long-run effects of historical immigration by examining the full range of effects from immediately after the Age of Mass Migration until today. We look at the impact of immigration on urbanisation since this variable is available from the decadal census for the period between 1860 and 2000. We find that by 1920 there was already a large positive effect of immigration on urbanisation. This effect remains stable until about 2000, when it increases slightly. Thus, the estimates indicate that the economic benefits of immigrants were felt early and persisted over time. This is consistent with immigration affecting early industrialisation, which due to increasing returns or lock-in effects caused a persistent and long-run increase in urbanisation.

Unfortunately, unlike urbanisation, other measures are not available during the full time span. For education and per capita income, we can examine how the effects evolve over time, but only in the post-WWII era. These estimates show that we observe the same trend for education and income as we do for urbanisation. For both outcomes, we find that the benefits not only persist, but also grow over time.

A potential concern with our analysis is that decades with high aggregate immigration flows may have been different in other ways. For example, if high levels of aggregate immigration happened to have coincided with high levels of industrial development or economic

growth, then the observed difference in county performance could have been driven by the fact that certain counties were connected during decades of rapid industrialisation and growth, independent of the presence of the migrants. Our analysis directly accounts for both possibilities and shows that our effects capture the impact of immigrants alone. A second potential concern with our estimates is the possibility that the aggregate flow of immigrants could have been driven by the expansion of the railway itself. In particular, if immigrant inflows tended to increase once the railway became connected to counties with greater future growth potential, then our findings may not be attributed to the presence of the immigrants. To account for this possibility, we use weather shocks in Europe to determine the impact of flows of immigrants arriving in the United States that were not driven by the timing of the expansion of the rail network. We find that weather shocks closely predict actual flows of immigrants and that these are indeed associated with the economic benefits observed.

Our findings provide evidence that helps us better understand the impacts of immigration in the history of the United States. The first is that in the long-run, immigration has had extremely large economic benefits. The second is that there is no evidence that these long-run benefits come at short-run costs. In fact, immigration immediately led to economic benefits that took the form of higher incomes, higher productivity, more innovation and more industrialisation. Our estimates provide evidence consistent with immigration facilitating economic growth. The less skilled immigrants provided the labour force necessary for industrial development. A smaller number of immigrants brought with them knowledge, skills and know-how that were beneficial for industry and increased productivity in agriculture. Thus, by providing a sizeable workforce and a (smaller) number of skilled workers, immigration led to early industrial development and long-run prosperity, which continues up to the present day.

Despite the uniqueness of the American experience with mass migration, our findings may still be relevant for understanding the long-run effects of immigration today. The short-, medium- and long-run benefits of immigration can be significantly large, and need not come at a high social cost. This suggests the importance of taking a long-run view when considering the current challenges brought by new waves of mass migration.

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Exemptions Featured in the 2015 German Small Investor Protection Act¹

This article investigates the effects of the exemptions of the Small Investor Protection Act, introduced in the summer of 2015. By imposing increased regulations, the Small Investor Protection Act aims to improve transparency for investors in the so-called “grey capital market”. Nonetheless, the act entails a number of exemptions. Firms financed via crowdinvesting platforms, as well as social, charitable and religious projects financed via so-called investments are exempt from the prospectus requirement. We base our investigation of these exemptions on a crowdinvesting-database, a survey of social and charitable organisations and interviews with experts in the field. In short, one year after the introduction of the Small Investor Protection Act no strong visible impact can be seen on the market for crowdinvesting in Germany. The data also shows that investment behaviour has not changed significantly due to the newly introduced self-disclosure requirements concerning the investor’s income and assets. However, the preferred types of investments in the market for crowdinvesting have recently changed from silent partnerships to profit-participating loans and subordinated loans. Both social and charitable organisations do not seem to be making use of the exemptions in the newly implemented act, since they can follow simpler rules and regulations to gain exemption from the prospectus requirements.

The Small Investor Protection Act (“Kleinanlegerschutzgesetz”, short: KASG), introduced on the 3 July, 2015, includes numerous amendments to the regulation of financial markets. The legislative initiative was largely triggered by the insolvency of the energy firm PROKON, which affected approximately 75,000 small investors. The aim of the KASG was to improve investor protection in the so-called “grey capital market”, which is a market for less-regulated financial products. The KASG amended the German Investment Act (“Vermögensanlagegesetz”, short: VermAnlG) by expanding its regulatory outreach to encompass types of investments (Vermögensanlagen) that were not previously covered by the VermAnlG, and by introducing prospectus requirements and subscription limits for publicly offered investments.

When regulating the financial market, the legislator faces a trade-off between the interests of investors and those of the issuers of investments. The investors primarily seek to protect their investments, while issuers request easy and affordable access to capital. Since providing a prospectus involves high costs for some issuers, the adjustments made by the KASG include exemptions.² Under certain conditions, crowdinvestments, as well as social, charitable and religious projects, are exempt from the VermAnlG. The goal of such exemptions is “to preserve the diversity of social and benevolent engagements in Germany” (BT-Drs. 18/4708, p. 60) with respect to social, charitable and religious projects. Crowdinvesting facilitates access to funding and therefore allows companies, especially at an early stage, to overcome barriers to financial access (Carpenter and Petersen 2002; Cassar 2004; Lopez de Silanes et al. 2015). By using online platforms, start-ups can promote both their innovative business ideas, as well as the issuing of investments to a wider audience. The investments are designed for small investors since the minimum thresholds are generally low, with some portals offering investments starting at one euro (Hornuf and Schwiener 2014). Furthermore, crowdinvesting can be seen as a form of advertisement for the issuing company and may be used as an indicator of the success of the business idea in the market (Colombo and Shafi 2016).

This article focuses on the effect and implementation of the KASG exemptions approximately one year after its introduction. To carry out our investigation, we use a crowdinvesting-database, data from a self-conducted survey of social, charitable and religious projects carried out in July 2016, as well as inputs from expert-interviews.

CHANGES DUE TO KASG IN DETAIL

The statutory amendments of the KASG mainly apply to the VermAnlG, which regulates the public offering of non-securitised investments.³ The application area of the VermAnlG was broadened to profit-participating loans and subordinated loans; however, the extension of the VermAnlG only applies if non-securitised investments (see Table 1) are offered publicly (§ 1 VermAnlG). An offer is public if it is not restricted to a certain group of people. In the case of an existing personal connection between investor and issuer, an offer cannot be considered public (Zwissler 2013).

The duties and liabilities of the VermAnlG are presented in Table 1, with Figure 1 summarising the various exceptions. Prior to the introduction of the KASG, § 2 VermAnlG already featured several exceptions.

² The DICE-database includes an international comparison of the regulation of crowdinvesting from Hornuf and Schwiener (2017), available at: <https://www.cesifo-group.de/de/ifoHome/facts/DICE/Banking-and-Financial-Markets/Financial-Markets/Financial-Market-Regulation/overview-crowd-funding-regulatory-frameworks.html>, which is explained in Hainz and Hornuf (2016).

³ Further changes are carried out for investor protection in the WpHG and the FinDAG, see Buck-Heeb (2015) for example.



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¹ This article is an abbreviated version of Hainz, Hornuf and Klöhn (2017a) and was published in the ifo Schnellendienst as Hainz et al. (2017b).

Table 1

Types of Investments and Their Regulation under the VermAnG

Investment (see § 1 para. 2 VermAnG)	Regulation
<ul style="list-style-type: none"> • shares that grant a participation in the company's earnings^{a)} • shares of trust assets • profit participating loans • subordinated loans • profit participating subordinated loans • participation rights • registered bonds • other assets^{b)} 	<ul style="list-style-type: none"> • minimum term and termination of investment (§ 5a VermAnG) • prospectus requirement (§§ 6 ff. VermAnG) • liability concerning information contained in the prospectus (§§ 20 ff. VermAnG) • financial accounting (§§ 23-25 VermAnG)

^{a)} Cooperative shares, silent partnerships, shares in business partnerships (GbR, OHG, KG), GmbH-shares and shares in foreign businesses of different legal forms.
^{b)} Especially direct investments into real assets, e.g. purchase of shipping containers, good wagons or commodities.
 However, there has to be a right of interest yield and payback or a mediation of a cash clearing claim in exchange for temporary relinquishments of money.

Source: VermAnG (German Investment Act), authors' illustrations.

Investments covered by § 2 VermAnG are not subject to the obligations in §§ 5a to 26 VermAnG⁴, and especially to the prospectus requirement (§ 6 VermAnG). In practice, exemptions for public offering are particularly important. Such exemptions exist for the public offering of cooperative shares without performance-based compensation for distribution (No. 1), for cooperatives offering profit-participating loans, subordinated loans or other investments without performance-based compensation for distribution (No. 1a)⁵, for private placements offering a maximum amount of 20 shares (No. 3 lit. a) and for investments with an aggregate value not exceeding 100,000 euros within 12 month (No. 3 lit. b). In addition, the exemptions apply to investments if the price per investor is at least 200,000 euros (No. 3 lit. c), or if they are only offered to a limited group of people (No. 6). However, the last exemption has very limited practical relevance.

Similar to § 2 VermAnG, the KASG introduced additional exemptions for certain markets like crowdinvesting, as well as for social, charitable and religious

projects. The catalogue of exemptions is not as comprehensive as in § 2 VermAnG, but it does include important regulations like the prospectus requirements.

§ 2a VermAnG privileges projects that are financed via crowdinvesting platforms. In addition to the exemption from prospectus requirements, § 2a VermAnG reduces requirements regarding the minimum duration of investments (§ 5a VermAnG) and financial accounting and reporting (§§ 23-25 VermAnG). Nonetheless, the application of the § 2a VermAnG is subject to the fulfilment of certain requirements. Firstly, the aggregate value of the investments issued by the issuer must not exceed 2.5 million euros. Secondly, the issuer must only offer profit-participating loans, subordinated loans or other investments according to § 1 para. 2 No. 7 VermAnG. Silent partnerships and profit-participation rights, which were commonly used in the initial days of crowdinvesting, are not covered by the exemptions. Instead, unless they fulfil the exemptions in § 2 VermAnG, they are subject to the prospectus requirement. Thirdly, the investor must stay within the subscription limit and must self-report income and wealth to the platform if the overall value of one investment exceeds 1,000 euros. If the investor's income or wealth exceeds a certain threshold, the maximum allowed investment is set at 10,000 euros. These limits do not apply to corporate entities.

⁴ With the exception of § 18 para. 2 and § 19 para.1 Nr.3 VermAnG.
⁵ Newly introduced by the KASG.

Figure 1

Important Exemptions According to §§ 2-2c VermAnG

Exclusions § 2 (1)	Exemptions (if investment = profit-participating loan or subordinated loan)		
	§ 2a Crowdinvesting ²	§ 2b Social projects	§ 2c Charitable projects / religious communities
No. 1 Cooperative shares ¹	(1) Aggregate value ≤ 2.5 million €	(1) If no performance-based reimbursement for distribution has been paid	(1) If no performance-based reimbursement for distribution has been paid
No. 1a Investment products of cooperatives under certain conditions [*]	(3) Investment counseling or mediation via online platform	(1) Aggregate value ≤ 2.5 million €	(1) Aggregate value ≤ 2.5 million €
No. 3a Shares of the same investment product ≤ 20	(3) Maximal investment volume (not for capital companies) • 1,000 € • 1,000 € – 10,000 € with self-disclosure • Freely available wealth > 100,000	(1) Debit interest rate < max. {1.5; issue yield mortgage bond}	(1) Debit interest < max. {1.5; issue yield mortgage bond}
No. 3b Total sales price of investment ≤ 100,000 €	or • Investment < 2x average monthly net income	(2) Statutory social objective and total assets, turnover ≤ 10 million €	(2) Corporate body who is recognized as non-profit or Domestic church or religious group with the legal form of a public body
No. 6 Investment that is only offered to certain groups			
§§ 5a – 26³ do not apply	§§ 5a – 26³ do not apply in parts (especially in terms of minimum duration, prospectus requirement and accounting standards)		

¹ If no performance-based compensation for distribution is paid.

² Also for other investments according to § 1 para. 2 Nr. 7.

³ Regulation on minimum duration and duty to inform.

Source: Vermögensanlagegesetz (VermAnG), authors' illustration.

These limits do not apply to corporate entities.

§ 2b VermAnG also largely exempts the issuer from VermAnG regulations. Most importantly, prospectus requirements are omitted. These privileges are only applicable to projects whose constitution entails a social objective (§ 2b para. 2 p. 1 VermAnG). What social means is not further defined in the law. The original draft of the legislation from the federal government argued that this rule is designed for "projects in order to create

affordable living space and space for micro-businesses or to create and operate nurseries at affordable rates” (BR-Drs. 638/14, p. 46). Throughout the subsequent debates in the Bundestag, it was “emphasised that these regulations should be broadened to encompass social projects with all legal forms. By implementing these legal changes, many projects are supported and thus the diversity of these projects in Germany can be maintained and fostered” (BT-Drs. 18/4708, p. 57).

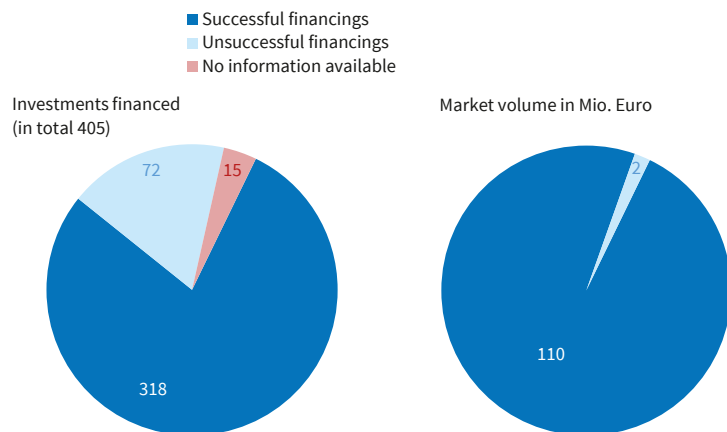
§ 2b VermAnlG only covers profit-participating loans and subordinated loans. In contrast to § 2a VermAnlG, other investments according to § 1 para. 2 No. 7 VermAnlG are not covered by this regulation. Additionally, according to § 2b para. 1 p. 1 VermAnlG, performance-based compensation may not be financed via the distribution of these investments. The aggregate value of the investment must not exceed 2.5 million euros and the yearly interest rate (§ 489 para. 5 Bürgerliches Gesetzbuch (BGB)) is limited to the higher value of either 1.5% or the normal market issue yield for investments of the same duration in the capital market in the form of mortgage bonds. Additionally, the issuer has to comply with certain turnover and balance sheet requirements (§ 2 para. 2 p. 1 VermAnlG).

§ 2c VermAnlG completes the newly-introduced exemptions. Like § 2a and § 2b VermAnlG, § 2c provides exemptions from the rules of the VermAnlG. The regulation is aimed at charitable projects and religious communities and was included in the KASG only shortly before the end of the legislative procedure. The legislator was guided by the following consideration: “regarding charitable organisations, it is important to release their honorary activities from bureaucratic and often costly constraints. By doing so, the leap of faith for the millions of citizens in Germany doing honorary work of public utility is strengthened” (BT-Drs. 18/4708, p.57).

The issuer must either be a corporation that is recognised as charitable and non-profit in accordance with § 52 para. 2 p. 1 AO (Abgabenordnung), or it must be a domestic church or religious community fitting into the legal form of a public corporation. § 52 AO considers a corporation to be charitable if its activities focus on advancing the general public in a material, intellectual or moral way (§ 52 para. 1 p. 1 AO). Support of the public is not prevalent if the group of persons benefitting from the support is limited, for example, through family, workforce or company affiliations, or if the group of persons is restricted based on geographical or occupational characteristics (§ 51 para. 1 p. 2 AO). Corporations are legal subjects according to § 52 AO if

Figure 2

Successful and Unsuccessful Financings as well as Realised Volume of Issues between 1 August 2011 and 1 June 2016



Source: Crowdfunding-database; authors' calculation.

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they are captured by the corporate tax law. That includes corporate entities, cooperatives, associations, institutions and foundations. § 2c para. 2 Nr. 2 VermAnlG also applies to non-Christian religious groups. Some Muslim communities, for example, have changed their legal form to that of a public corporation in recent years.

In contrast to § 2a and § 2b VermAnlG, § 2c VermAnlG entails no obligation to issue an investment information sheet (“Vermögensanlagen-Informationblatt”) (§ 13 VermAnlG). There are further extensive exemptions from accounting regulations if the aggregate value of the investment does not exceed 250,000 euros (§ 2c para. 1 p. 3 VermAnlG). Apart from that, requirements are similar to § 2b VermAnlG, except that requirements regarding the turnover or balance sheet thresholds do not exist.

In accordance with § 2d VermAnlG, investors who invest into projects covered by §§ 2a to 2c VermAnlG obtain a right of withdrawal, which was newly introduced by the KASG.

EXEMPTIONS FOR CROWDINVESTMENTS: § 2A VermAnlG

Database

The evaluation of § 2a VermAnlG is based on a crowdfunding-database, which was established and has been updated by Lars Hornuf and Lars Klöhn 1 August 2011.⁶ The database includes information on start-up financing, real-estate financing, financing of ecological projects and movie financing on 37 German crowdfunding platforms. Out of these 37 platforms, 22 were still operating in 2015, which means that they offered at least one investment opportunity over the preced-

⁶ Early publications, based on this crowdfunding-database have already been published in Klöhn and Hornuf (2012), Klöhn and Hornuf (2015), Hornuf and Neuenkirch (2017), Klöhn, Hornuf and Schilling (2016a; 2016b; 2016c).

ing 12 months. This evaluation covers nearly the entire market for crowdinvestings under the exemptions of § 2a VermAnlG. The analysis covers the observation period between 1 August 2011 and 1 June 2016, which means that all crowdinvestings since the set-up of this new form of financing are taken into consideration.

DEVELOPMENT OF THE CROWDINVESTING MARKET BETWEEN 2011 AND 2016

Prior to the 1 July 2016, 405 investments were offered by German crowdinvesting portals like Companisto, Exporo or Seedmatch, of which 318 were brokered successfully (see Figure 2). With 238 successfully brokered investments, the majority of these crowdinvesting projects fall into the area of corporate finance. Another 33 projects were in the field of real-estate financing, and 47 cases of financing were ecological and social projects or movie financing. Overall, the market volume amounts to 110 million euros. Of this amount, 66 million euros were used to finance (start-up) businesses, 36 million euros to finance real-estate and eight million euros for ecological and social projects, as well as movie financing. Although several new crowdinvesting portals have been founded since 2011, larger and successfully brokered investments are mostly limited to a select group of portals. The market leader Companisto brokered over 27 million euros on its platform, with Seedmatch brokering close to 27 million euros. The real-estate funding platform Exporo has brokered around 17 million euros of investments since 2014. In total, the German market for crowdinvesting has grown between 2011 and 2015 at an annual rate of 220%. The funding process takes 68 days on average. Most of the issuers are start-up businesses. Out of the 405 issuers, 310 were founded after 2009. A quarter of the issuers were founded less than three years before funding started.

Looking at the economic sectors, crowdinvestments are often conducted for businesses that operate in the field of information and communication; or that are active in the commerce sector. This may be because most of the companies have an online-based business idea. The highest investment volume to date has been achieved within the real-estate sector.

SIZE AND TYPE OF INVESTMENT PRODUCT

An evaluation of total sales prices shows, as depicted in Figure 3, that 253 out of 318 issuers collected less than 500,000 euros. Nonetheless, these issuers only account for

approximately one third of the entire market volume. Thus, a mere 65 issuers represent 66% of the market volume. Of those 65 issuers, six individual issuances were each worth over 2.5 million euros. Within eleven months of the KASG coming into force, the portals were able to broker only 24 million euros of funding. In the eleven month before the KASG this figure totalled 31 million euros.

The investments used for crowdinvesting have changed from silent partnerships to profit-participating loans and subordinated loans in recent years (see Figure 4). In general, profit-participating loans are the most frequently used type of investments, followed by silent partnerships and subordinated loans. Securities were offered by five issuers. The market volume of profit-participating loans with 65 million Euros and subordinated loans with 30 million Euros adds up to 85% of the entire issue volume. Issuers from real-estate offer mostly subordinated loans. Profit-participating loans and silent partnerships are used by three real-estate issuers only. Two real-estate issuers offered securities.

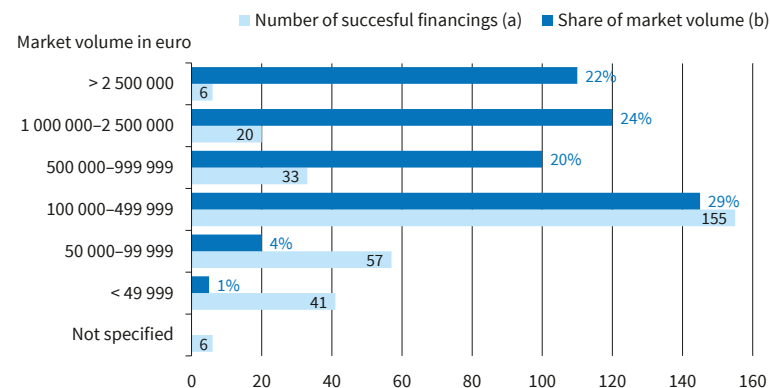
CHARACTERISTICS OF INVESTORS

On average, investors in the market for crowdinvesting are 40 years old. Across all platforms, the majority of investors are male. For 270 out of 318 successful crowdfundings, the exact number of investors is known. Here we can observe an average of 289 investments per issue.

The KASG includes a subscription limit. If an investment exceeds 1,000 euros, investors have an obligation to self-report their private wealth. If investors tried to avoid self-reporting, we would expect to see a high number of investments of exactly 1,000 euros. Furthermore, the KASG limits the investment of a single investor to 10,000 euros per investment. If this threshold were binding, we would expect to observe an increase in observations at exactly this level. To analyse the distribution of invested amounts, we evaluate 54,456

Figure 3

Successful Financings and their Share on Total Market Volume between 1 August 2011 and 1 June 2016



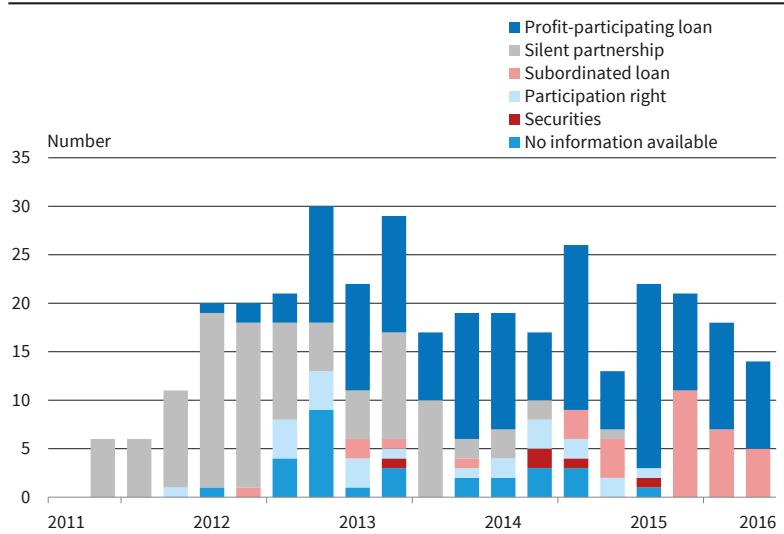
(a) In total 318. (b) In total 110 Mio. euros.

Source: Crowdinvesting database; authors' calculations.

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Figure 4

Types of Investment Products Offered^a
Per quarter



^a In total 351. From 4th quarter 2011 until 2nd quarter 2016.

Source: Crowdfunding-database; authors' calculations.

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investments by 137 issuers on four different crowdfunding platforms. While investors who invest in excess of 1,000 euros account for just 15% of investors in the market for crowdfunding, they raise 72% of the market volume and thereby make up the lion's share of the market. In the period 11 months before and 11 months after the implementation of the KASG, 13% of all investors invested over 1,000 euros. The number of investors who invested exactly 1,000 euros did not change after the KASG came into force. The number of investors who invested more than 10,000 euros decreased after the KASG came into force from 0.6% to 0.1%. By contrast, the number of investors who invested exactly 10,000 euros increased slightly from 0.9% to 1.1%. These observations suggest that investment behaviour did not materially change because of the newly-introduced self-disclosure requirements.

MARKET CONSOLIDATION AND FOREIGN CROWDFUNDING PLATFORMS

To date, no German crowdfunding platform has relocated its registered office abroad. However, two German crowdfunding platforms have merged with the Austrian portal Conda. In 2014, the Munich-based platform Mashup Finance merged and in 2016 the platform Bankless24 followed suit. In general, German issuers can finance themselves via large portals abroad. For Austria, Switzerland and the United Kingdom,

we evaluated seven platforms and identified a total of four German issuers for Austria and Switzerland.

METHODOLOGICAL APPROACH AND DATA COLLECTION

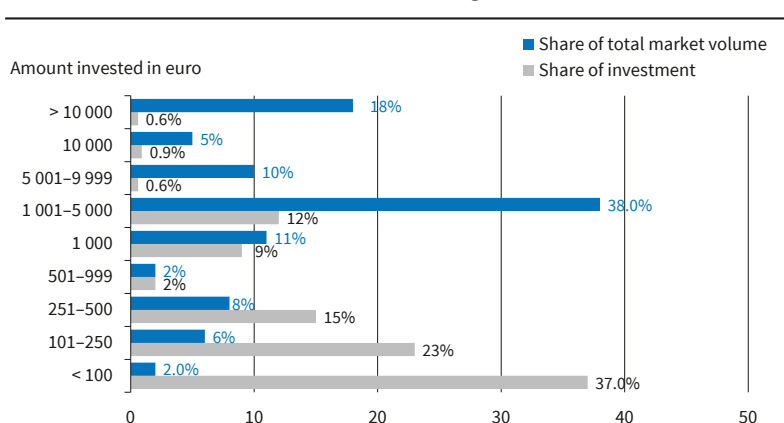
Unlike with the market of crowdfunding, the market for financing social and charitable projects is substantially less transparent. We therefore employ a different methodical approach to identifying and characterising issuers who could potentially be covered by the exemptions in § 2b and § 2c VermAnlG. In the first stage, we identify relevant sectors drawing on expert interviews with associations and practitioners. Via a comprehensive online

search we identify relevant issuers from the previously identified sectors. In the second stage, we collect survey data on both of the projects conducted and issued investments of the previously identified issuers.

Relevant areas for social projects include energy, housing, village shops and community and work partnerships. The social and charitable projects include churches and religious communities, independent schools (e.g. "Waldorf" schools), as well as foundations and care facilities (e.g. hospices). We sent out a total number of 507 questionnaires. By the end of the investigation period we received 45 responses (32 from social projects, 13 from charitable projects). Since we did not receive any replies from religious communities, the following analysis will focus on social and charitable projects when looking at exemptions according to § 2c VermAnlG.

Figure 5

Amounts Invested in the Market for Crowdfunding^a



^a n = 56 456, N = 137 issues by Companisto, Innvestment, Seedmatch and United Equity.

Source: Crowdfunding database; authors' calculations.

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When interpreting the results, it is important to bear in mind the potential limitations related to data collection. Since there is no comprehensive database for organisations that may be affected by §§ 2b and 2c VermAnlG as there is for crowdinvesting, we were unable to resort to a total population. Instead, we attempted to learn about the population through an intense and comprehensive investigation. Furthermore, there may be selection problems due to voluntary participation in the survey, since there may be reasons influencing willingness to participate that are also related to the financing of a project or the investments. Furthermore, the sample size is relatively small with 45 observations. Although the collected data may not be considered representative, this study is the first in the field that investigates the investment structure of social and charitable projects and offers initial insights into the investment behaviour of such projects.

Moreover, we are not able to compare projects before and after the introduction of the KASG since there are only three observations for the period after its introduction in July 2015. However, the data provides evidence of the choice of certain investments prior to the introduction of the KASG when issuers were not yet influenced by the regulations of the KASG.

ORGANISATIONAL FORM AND TARGETS OF THE ISSUERS

While social projects are mostly organised as cooperatives or companies with limited liability (“Unternehmergesellschaft [haftungsbeschränkt]”), charitable projects tend to be organised as registered societies or trusts. Social projects mostly use sale revenues from investments to acquire, build, renovate or run real-estate projects, followed by building up or maintaining energy generation facilities. Charitable projects mostly use revenues to build or renovate schools. At the same time, schools use the so called “parental loan”

(“Elterndarlehen”) to finance parts of their working capital.

For social projects the average total investment sum lies slightly below 2.5 million euros. On average, just over 50% of the project volumes of social enterprises are covered by revenues from issuing investments. The same holds for the investments of charitable projects, where the average investment volume lies slightly below two million euros and therefore below the average for social projects. At the same time, the coverage of the total project volume through revenues from investments is about 47% and is therefore slightly lower than for social projects.

TYPE OF INVESTMENT

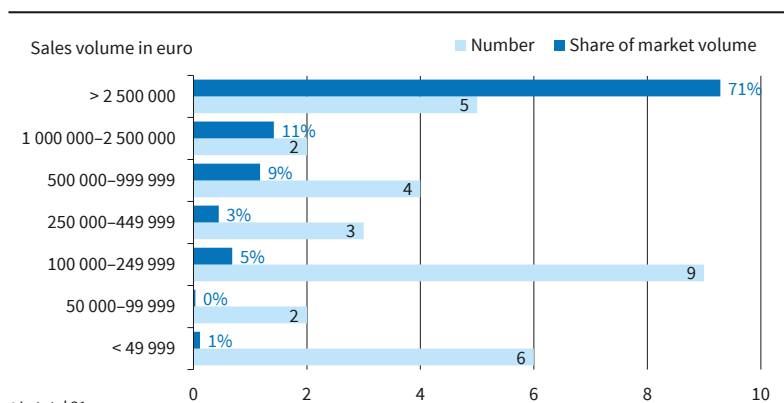
Social projects mostly employ subordinated loans. Furthermore, shares granting a participation in the company’s earnings (mainly cooperative shares and silent partnerships) are employed relatively often. Similarly, a large part of the charitable projects use subordinated loans for financing. However, a similar number of projects are financed by instruments that are not characterised as investments according to § 1 para. 2 VermAnlG, such as interest-rate free loans and loans against bank guarantees. For issuers in the social sector we have data on the interest rate for 14 subordinated loans and one profit-participating loan. For one subordinated loan no interest rate was declared. The remaining interest rates range from 0.1% to 4.5%. In many cases an interest rate range is provided. For four of the seven subordinated loans for charitable projects, the parties did not define an interest rate. This suggests that subordinated loans in the charitable sector, as opposed to the social sector, frequently remain non-interest-bearing. For the other three subordinated loans the interest-rate spectrum ranges from 0% to 4%. Overall, we cannot identify any time trend for the interest rates.

In the social sector most investments have a value of up to 250,000 euros. One third of the issues have a value of between 100,000 euros and 250,000 euros. 20% of the investments have a value of up to 50,000 euros. However, 16% of the issues have a value of over 2.5 million euros.

For the charitable projects, nearly one half realised funding’s of a total value exceeding 250,000 euros. However, none of the issues for charitable projects realised investments of over one million euros. Even in the range between 250,000 euros and one million euros the majority of issues (around one

Figure 6

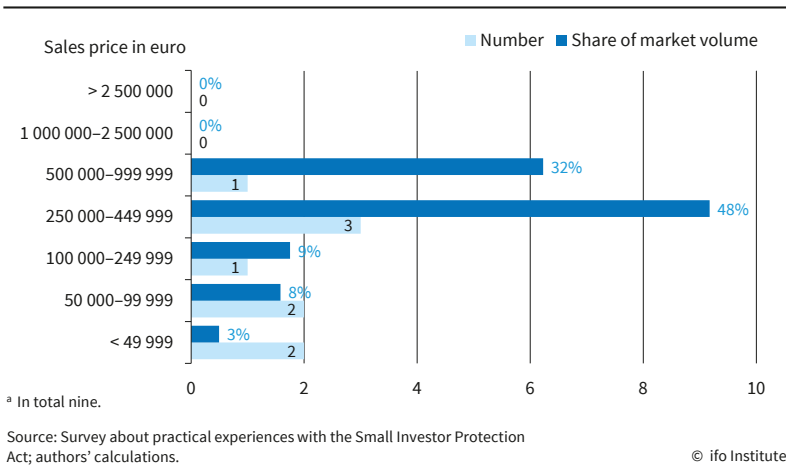
Value of Investments Issued by Social Projects^a



^a In total 31.

Source: Survey about practical experiences with the Small Investor Protection Act; authors’ calculations.

Figure 7

Value of Investments Issued by Charitable Projects^a

third) realised a total value between 250,000 euros and 500,000 euros. Based on these figures, it can be argued that issues for charitable projects seem to have lower volumes than issues for social projects.

COMPLIANCE WITH EXEMPTION RULES

None of the investments in our survey were sold with performance-based compensation for the distribution. For 30 of the social projects we have sufficient information to evaluate the applicability of the exceptions and exemption rules of the VermAnG. Four of them would have been subject to all duties and liabilities of the VermAnG if they had been issued after the KASG came into force. All of the remaining projects would have been subject to the exemptions. All projects except for one, which could have made use of the exemption according to § 2b VermAnG, would not have been covered by the VermAnG because of § 2 VermAnG. Out of the 13 charitable projects, 12 would not have been subject to the regulations of the VermAnG. One project would have benefited from the exemptions in § 2c VermAnG. Another project would possibly have been subject to § 2c VermAnG. Six investments would not have been classified as investments according to § 1 para. 2 VermAnG.

In short, for social and charitable projects we can conclude that for nearly all of those projects that issued an investment, the exemption of § 2 para. 1 Nr.3 lit. a and b VermAnG would have been applicable and the VermAnG would not have applied.

PERCEPTION QUESTIONS

In our questionnaire, we also ask questions that assess the general financing situation and evaluate investments. Overall, the data exhibits a relatively high degree of heterogeneity in the usage of different sources of financing. Classical bank financing is evalu-

ated very differently. Some survey participants see bank financing as an important and accessible source of financing. Other projects emphasise that they make no use of bank financing. Furthermore, there are projects that use the investments to increase their equity and thus gain access to bank financing.

Most respondents indicate a high level of satisfaction with the choice of a certain investment (e.g. silent partnership or subordinated loan). Taxes and the absence of shareholder involvement are considered unimportant when deciding on the type of

funding. With respect to the prospectus requirements, 50% of respondents indicate that the potential exemption from this requirement is irrelevant to their decisions over the investment type, while 27% consider it relevant.

EXPERT INTERVIEWS

To obtain a more detailed picture of the practical relevance of §§ 2a-2c VermAnG, we conducted interviews with experts who may have important information on the exemptions introduced by the KASG because of their prominent market position. The experts are representatives of issuers, investors, platform operators, industry organisations, regulation authorities and financial service providers.

All experts agreed that the exemptions are of great importance to crowdfunding, which is in line with our data analysis of the German crowdfunding market.

As far as the practical relevance of § 2b VermAnG is concerned, the expert interviews also give a coherent impression. They conclude that the exemptions of § 2b VermAnG are not used by market participants, since they utilise the exemptions of § 2 VermAnG instead. This view is underpinned by information from the securities regulator ("Bundesanstalt für Finanzdienstleistungsaufsicht", short: BaFin) that has not yet received any investment information sheet for projects according to § 2b VermAnG.

Furthermore, experts agree that § 2c VermAnG is also of no practical relevance. Nonetheless, since there is no obligation to submit investment information sheets to the BaFin, this conclusion cannot be confirmed as for the case of § 2b VermAnG.

CONCLUSION

Before the introduction of the KASG, market participants feared that it would constitute a barrier to the

growth potential of crowdinvesting in Germany and a harsh limitation of financing opportunities for social and charitable projects.

The market growth of crowdinvesting cannot be said to have fallen since the introduction of § 2a VermAnlG. Prior to 1 June 2016, all active crowdinvesting platforms brokered financings worth 110 million euros. Although market growth recently decreased, this decline began back in 2014. One reason for this tendency may be the negative returns in the market segment of start-up crowdinvesting (Hornuf and Schmitt 2016). It seems unlikely that these negative returns will become positive for investors in the future, although fixed interest rates and repayments at the end of the investment period may mitigate the negative returns somewhat. According to our data, the introduction of subscription limits and self-disclosure requirements did not induce a change in investment behaviour. However, the preferred instrument for financing seems to have changed in the market for crowdinvesting from silent partnerships to profit-participating loans and subordinated loans. Due to the relatively small size of the market, there are currently no systemic risks of crowdinvesting activities (Dorfleitner et al. 2017). The market leaders Seedmatch and Companisto brokered 46% of the financed volume until 2015, which points towards a high market concentration.

Our survey of the Small Investor Protection Act (KASG) amongst social and charitable organisations delivers first insights into their funding behaviour. Data clearly shows that virtually no social or charitable organisation would be covered by the regulations of the Small Investor Protection Act. The investments issued by most project initiators would be subject to the exemptions in § 2 VermAnlG. Therefore, the newly-introduced exemptions in §§ 2b, 2c VermAnlG are of practically no relevance. Comments in the questionnaires, however, show that there is a high level of uncertainty regarding the newly-introduced regulations for social as well as charitable projects. The decision-makers in these projects seem to be insufficiently informed of the exemption provision.

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Dual Citizenship in the EU

While debates about dual citizenship are common today, this was not the case until recently. Even during the Cold War, dual citizenship was largely regarded as unacceptable. Citizenship was a binding pact representing one's political loyalty to a nation state. A dual citizen would be disloyal by default because of competing allegiances. Most states declared dual citizenship to be illegal. Anyone who wanted to acquire a new citizenship would have to renounce their old one. In cases in which dual citizenship was unavoidable, the person in question would have to choose which nationality s/he wanted to keep upon reaching legal adulthood.

Opposition to dual citizenship was not just a question of political adherence and identity – states also wanted to protect their own authority. Citizenship was supposed to be the ultimate contract between the government and the governed. This contract would be violated by dual citizenship; for example, a citizen could claim to be a foreigner when it came time to register for the draft. A dual citizen could also try to receive benefits from two states. Many believed that dual citizenship would make it much more difficult for the state to maintain authority over its citizens (Faist et al. 2004).

After the Cold War, however, attitudes towards dual citizenship liberalised. This was largely due to two trends: increasing gender equality and many states' decision to abolish mandatory military service. Gender equality and dual citizenship are closely related because it used to be that as soon as a woman married, she would have to give up her own citizenship for the citizenship of her husband. Not only did this force women to give up their citizenship of origin, it also complicated matters for children who were born out of wedlock who then needed their fathers to recognise them in order to receive any kind of citizenship at all. However, the Convention on the Nationality of Married Women run by the UN in 1957 marked a major shift in perceptions because many states then agreed that women should not have to give up their citizenship upon marriage. This was reinforced by the European Convention on Nationality of 1997 (Faist 2004). These new laws greatly increased the number of children eligible for dual citizenship. They stipulate that if both parents are citizens of different countries that both allow for citizenship by birth, then their children are automatically eligible for dual citizenship.

The European Convention on Nationality in 1997 marked a shift in approach among European states

with regards to citizenship in other ways too. It required states to implement a path towards naturalisation and to more deeply consider the nationality of spouses, children born abroad or adopted, and many other cases when writing laws on citizenship. It also granted states the right to take citizenship away from their own citizens if they applied for a different citizenship or if they performed military service (Faist 2004). Conscription was a frequent reason for many states to deny dual citizenship. Dual citizens were expected to serve in their country of residence, but if that country differed from that of their citizenship, their citizenship could also be revoked. As conscription became less common, fewer dual citizens would have to give up a citizenship because they probably would not have served in the military. Due to these different trends, more children have become dual citizens because they are eligible for the citizenships of both parents. This has become especially true as the world becomes more connected and international trade and relationships continue to multiply.

Attitudes towards citizenship itself have also changed. Instead of being seen as a contract between a state and its people, citizenship is now seen as a human right. The UN Declaration of Human Rights stipulates that everyone has the right to nationality. Dual nationality can be seen as a way to prevent statelessness and to protect nationality as a human right, as well as an important part of peoples' identity (Vink and de Groot 2010). As immigration continues, many think that the option of dual citizenship will help immigrants to integrate more fully. As for the future of citizenship itself, some scholars are proponents of transnationalism, saying that the emergence of a growing number of dual citizens will loosen restrictions on dual citizenship. Supporters of post nationalist theory think that the nature of citizenship itself will change as the relationship between the state and the citizen continually evolves (Bloemrad 2004).

PROS AND CONS

Despite dual citizenship becoming more common, it is a topic that remains heavily debated. This report will look at the different attitudes towards dual citizenship in the various European Union member states and how they have changed in the last 55 years.

Proponents of dual citizenship think that it creates good opportunities for immigrants to integrate politically as well as socially. Many immigrants often still feel tied to their country of origin and are therefore reluctant to give up their citizenship of origin. Dual citizenship allows them to live out their different national identities without having to choose one over the other. By being given all of the rights of a citizen, immigrants also do not feel like a second-class citizen (Faist et al. 2004). Some studies have also shown that dual citizenship increases the number of immigrants who choose to naturalise in their country of residence (Vink and de

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Groot 2010). All in all, dual citizenship might be able to bolster immigrants' integration into their new country and the EU.

However, dual citizenship is not without flaws. Many worry that those with dual citizenship may take advantage of their status to double vote. In the EU, this worry is especially acute because a citizen of France and of Italy, while legally able to take part in both local elections, could also illegally vote twice in EU elections. States may also have to worry about a lack of loyalty. If many individuals end up with two citizenships, those people may not be as loyal or dedicated to their home countries (Faist et al. 2004).

DUAL CITIZENSHIP IN THE EU

In the EU itself, there are significant differences in attitudes towards dual citizenship based on country. Northern Europe, which traditionally receives many immigrants, has been historically more focused on integration, whereas Southern Europe is more occupied with sustaining a relationship with its many emigrants.

One of the important factors in the dual citizenship debate is the interaction of citizenship by blood or by birthplace. Generally, most countries have jus sanguinis, or citizenship by blood, in which parents pass down their citizenship to their children, or jus soli, which means that anyone who is born within the country's territory automatically becomes a citizen. Most European countries have citizenship laws in which citizenship is given by birth, meaning that children can obtain the citizenship of their parents. However, jus soli is seen as an important way of measuring openness towards immigrants and potential dual citizens. In the table below, stances towards citizenship by birthplace and dual citizenship are outlined for 25 of the 28 EU member states.

It is important to note that although countries can regulate the naturalisation of spouses in international marriages by demanding proof of renunciation, the real problem in terms of enforcement is with children. In the EU, all of the countries that allow for jus soli also allow dual citizenship to some degree. Therefore, countries that do not allow dual citizenship will also not allow citizenship by birthplace.

Another interesting observation to note when looking at this table: the Scandinavian countries as well as some Mediterranean countries, like Greece, Spain, Croatia, Italy and Malta don't allow citizenship by birthplace. In recent years, the number of those allowing dual citizenship has also increased continuously.

POLICY DATA

Because most countries only have data on their population and the number of naturalisations, it is rather difficult to assess how many dual citizens there are in the EU member states, let alone in the entire EU. How-

Table 1
Stances Towards Citizenship in 28 EU Member States

Country	Citizenship by birth (jus soli)	Dual Citizenship
Austria	No	No
Belgium	Yes	Yes
Czech Republic	No	No
Cyprus	No	Yes
Denmark	No	No
Estonia	No	No
Finland	No	Yes – since 2003
France	Yes	Yes
Germany	Yes – since 2000	No – German-born children of foreigners are allowed to be dual citizens until 23, at which point they have to choose. Also, naturalised citizens still need to relinquish prior citizenship
Greece	No	Yes
Hungary	No	Yes
Ireland	Yes	Yes
Italy	No	Yes – since 1992
Latvia	No	No
Lithuania	No	No
Luxembourg	No	No
Malta	No	Yes
Netherlands	Yes	Yes – De facto practice of allowing naturalised citizens to keep their prior citizenship
Poland	No	No
Portugal	Yes	Yes
Slovenia	No	No
Spain	No	No
Slovakia	No	No
Sweden	No	Yes – since 2001
United Kingdom	Yes	Yes

Source: Howard (2005).

ever, there is a database created by Vink and De Groot (2015a, 2015b and 2015c) through the University of Maastricht and Harvard that compiles different policy changes related to dual citizenship. This data has many different sources which are listed on their website. They code for countries that takes the citizenship of origin of citizens who apply for a second citizenship, countries that don't automatically take the citizenship of those who apply for a second, but might require them to renounce it, and countries where dual citizenship is allowed.

The codebook of this data shows various policy approaches adopted by countries around the world to dual citizenship. Figure 1 presents an overview of some of these policy stances. The red line shows either the policies coded as 0 or 999, which means that the rules on loss of citizenship in the country aren't known. All policies in the 100s are marked in dark blue. Citizens of these countries will automatically lose their original citizenship when applying for a second citizenship. Variation within all policies accounts for whether the country in question supports the first chapter and/or the second protocol of the Strasbourg Convention. The

Strasbourg Convention was officially entitled the “Convention on the Reduction of Cases of Multiple Nationality and Military Obligations in Cases of Multiple Nationality” and was signed in Strasbourg in May 1963. The first chapter is entitled “Reduction of cases of multiple nationality” and describes different cases and ways in which dual citizenship can be avoided. The second protocol was signed in 1993 and reflects a change of perspective. It lists the growing number of immigrants, families that feature many different citizenships, and children born out of wedlock who have difficulty in obtaining citizenship as reasons for avoiding statelessness and trying to allow people to retain their citizenship of origin (in certain cases).

While the countries in the 100s do vary in terms of whether or not they accept the first chapter and/or the second protocol of the Strasbourg Convention; ultimately none of them allow citizens to retain their citizenship of origin. For the light blue line, which is an aggregation of policies in the 200s, people will not automatically lose their citizenship, but their country of origin might renounce their citizenship. In this case, attitudes towards dual citizenship are a bit more open. The data set also codes for countries in which people will not automatically lose citizenship of their origin country, and where the origin country will not renounce their citizenship. These policy stances are coded in the 300s, but they do not exist in the 28 European member states, and therefore are not present in Figure 1 (Vink and De Groot 2015).

The original data shows the various policy stances of all countries from 1960 to 2015. In order to create a legible graph, we only look at the current 28 member states of the EU. For each year, the data shows which percentage of member states fall under a certain policy category. This way, we can easily track the development different policy trends in the EU as a whole.

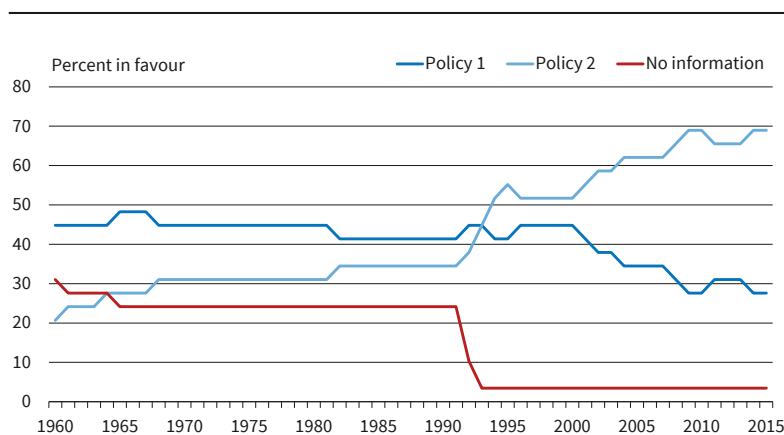
Looking at the data, we can see that far more data is available after 1992. Prior to that year, these countries did not have a clear policy towards dual citizenship. As of 1993, many more countries opted for more open policies and decided that when people applied for a new citizenship, they shouldn't

automatically lose their previous citizenship. This can be seen in the dramatic increase in the early 1990s, which plateaued a little in the late 1990s, but rose again throughout the 2000s. The early 1990s are an interesting focal point for observing this shift because the second protocol of the Strasbourg Convention was signed in 1993, which signals that many were reassessing how they felt about citizenship and wanted to find a way to better integrate immigrants and handle children with parents of different nationalities. In the same vein, the percentage of EU countries that adopted policies in which anyone who wanted a second citizenship would automatically lose their citizenship of origin decreased as of the early 2000s. In general, this data supports more qualitative research on the opening up of European governments to dual citizenship.

Figure 2 shows a small selection of countries to gain a better understanding of how the different regions of Europe changed in terms of policy. Poland and Greece are consistently more open to dual citizenship, with policies aimed at not forcing people to automati-

Figure 1

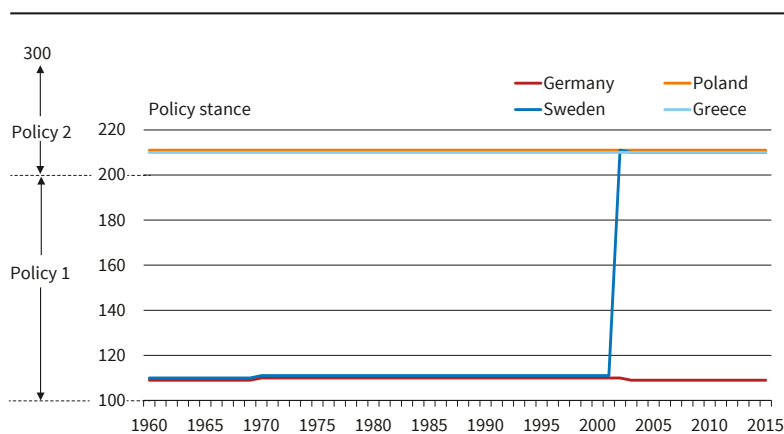
Attitudes Towards Dual Citizenship in EU 28



Source: Vink et al. (2015); authors' calculations. © ifo Institute

Figure 2

Dual Citizenship Policies of Selected Countries



Source: Vink et al. (2015); authors' calculations. © ifo Institute

cally lose their citizenship. Sweden used to be more restrictive but opened up to dual citizenship in the early 2000s, as did other Scandinavian countries. Germany, on the other hand, has been relatively closed to dual citizenship. It dramatically changed its laws in the 2000s and there are some exceptions to its ban on dual citizenship, but they are not coded for in the data, so Germany is shown as being closed to dual citizenship.

When looking at the data in terms of regions, one can also see that Eastern Europe largely supports the concept of a second citizenship, with the exception of the Czech Republic and Hungary, which are a bit more restrictive. Scandinavian countries were also generally more restrictive until the 2000s. The Mediterranean countries are mostly open to dual citizenship, except for Spain. In Western European countries, attitudes tend to vary, while the Baltic countries are generally relatively closed, except for Latvia in the 2000s.

EU CITIZENSHIP AND THE FUTURE OF DUAL CITIZENSHIP

As for the future of dual citizenship in the European Union, it should be noted that all citizens of EU member states are already dual citizens, because they are citizens of their member state, as well as of the EU. EU citizenship allows people to vote in EU elections, travel freely, and run for office, among other rights. Many EU member states have also allowed dual citizenship if, and only if the new citizenship comes from a country that is also an EU member state. In 1993, Belgium, France, Greece, Italy, Ireland, Portugal, the UK and Germany all passed laws that were exceptions to their ban on dual citizenship, allowing their citizens to acquire a second citizenship if it was that of another EU member state (Hansen 1998). Other states, like Austria and Italy, simply have shorter residence requirements for naturalisation for EU citizens (Vink and De Groot 2010). When looking at the data on German dual citizens in 2015, as shown in Table 2, it is evident that dual citizens of Germany mostly come from Europe, with the majority of them coming from other EU member states.

However, while EU citizenship does give citizens certain perks, some are curious about how meaningful citizenship really is. All people with EU member state citizenship automatically have EU citizenship. However, this means that in order to obtain EU citizenship, there are technically 28 different ways to do it, because each member state has jurisdiction over how people obtain its own citizenship (Kochenov 2011).

Dual citizenship in the EU is likely to continue to develop and reflect changing attitudes towards the proper relationship between a state and its people. Buried in these policies are philosophies about how we define personal identities, the identities of a group, and how to allow for these groups to grow and change and accommodate each other as people migrate. Dual citizenship may become a common phenomenon in the next decades, or it may be on the wane. More data on

Table 2
Dual Citizens in Germany in 2015

Citizenship	German Dual Citizens (in thousands)		
	Total	Men	Women
The First Foreign Citizenship	1 686	827	858
Europe	1 308	630	678
EU-28	737	345	393
Bulgaria	13	5	8
France	49	20	29
Greece	50	26	24
Italy	117	60	58
Croatia	22	9	13
Netherlands	27	14	13
Austria	35	15	20
Poland	220	102	118
Portugal	18	9	9
Romania	67	28	39
Spain	36	18	18
United Kingdom	24	11	13
Non EU-Europe	571	286	285
Bosnia and Herzegovina	8	n.a.	n.a.
Kosovo	15	9	6
Russian Federation	228	111	117
Serbia	18	8	10
Turkey	246	128	118
Ukraine	13	6	7
Africa	70	41	29
Morocco	29	17	12
Egypt, Algeria, Libya, Tunisia	25	15	11
America	126	63	63
North America	69	36	34
United States	64	33	31
Central and South America	57	27	30
Asia, Australia, Oceania	182	94	88
Near and Middle East	135	70	65
Iraq	8	5	n.a.
Iran	48	25	23
Kazakhstan	41	18	23
Syria	12	8	n.a.
Other Asia	41	20	20
Afghanistan	9	6	n.a.
Previous Territory of Yugoslavia	75	36	39
USSR	299	143	156
Guest worker states	580	300	280
EU member states before 2004	379	183	195
EU member states since 2004	359	1	197

Source: Destatis (2015).

the number of dual citizens and how they obtained their citizenships is crucial to gaining a deeper understanding of this issue. This would lay the foundations for more concrete judgements on dual citizenship's effects on integration and the lives of citizens of EU member states and the EU.

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Student Mobility in Tertiary Education

Studying abroad yields valuable academic and cultural benefits, increases students' employability in the international labour market and, when going to another EU member state, strengthens a European identity. With respect to employability, it was found that mobile students face less unemployment after graduation and have better career prospects as well as higher salaries (European Commission 2014; King and Ruiz-Gelices 2003; Di Pietro 2015). The importance of student mobility was also recognised by EU ministers in 2011, who decided to increase the target figure for the proportion of higher education students completing a study or training period abroad to 20% in the "EU Education and Training 2020 strategy" (European Commission 2017).

In this article we examine the mobility of students from EU countries, which varies strongly between the member states. To this end a mobile student will be defined as someone physically crossing national borders to participate in a study or training activity relevant to tertiary education (Eurostat 2016)². The available data is presented for all EU28 member states, except Cyprus, Malta and Luxembourg, which were excluded due to the very small number of domestic tertiary students (<50,000 in 2015, Eurostat (2017b)).

INWARD MOBILITY

Eurostat (2017a) provides data on the share of mobile students studying in EU countries in a given academic year, as a percentage of the total number of students enrolled in tertiary education in the respective country. The upper graph in Figure 1 shows the share of mobile students at all levels of formal tertiary education, while the lower graph presents the data split by educational level.

The proportion of students that moved to another country for higher education varies greatly across countries and educational levels. While the share is 18.5% of the total student population in the UK for the 2014/15 academic year, only 0.5% of students in Croatia came from abroad. Other countries with shares of mobile students above 10% include Austria, Belgium and the Czech Republic, which are particularly popular

¹ ifo Institute (both).

² The indicators which countries apply to determine a mobile student vary in the available datasets. The country of usual residence is used by Estonia, Ireland, Spain, Lithuania, Romania, Slovenia, United Kingdom; country of upper secondary diploma by Belgium, Croatia, Denmark, Netherlands, Austria, Poland, Portugal; the country of citizenship by Bulgaria, Czech Republic, France, Italy, Hungary; Slovakia and the country of prior education by Denmark, Germany, Lithuania, Latvia, Finland. These country-specific indicators are common to all datasets used in this article.

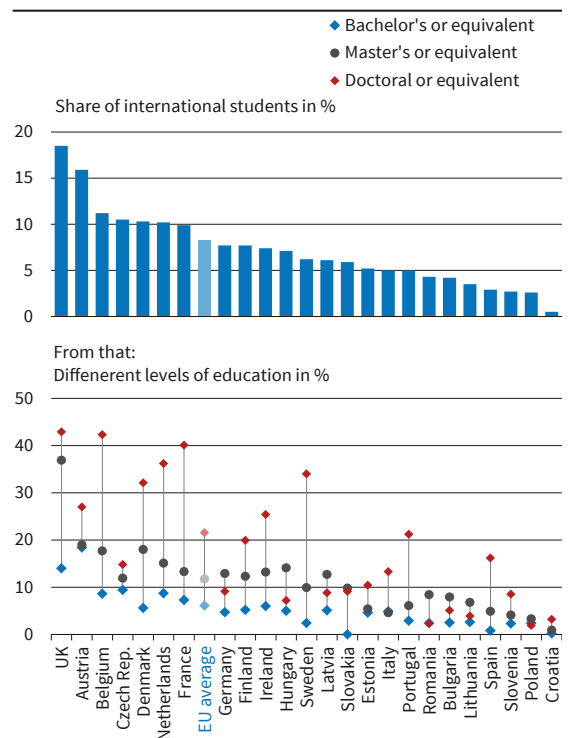
among students from the respective neighbouring countries (Eurostat 2017a). In the UK, on the other hand, the international student body comes from a wide range of countries around the world, which is most likely due to the low language barrier (Eurostat 2017a). At the other end of the scale are the countries that joined the EU most recently, i.e. Croatia, Bulgaria, and Romania, each with shares of mobile students below 5%.

When looking at the data divided by educational level, it emerges that for most countries, the share of mobile students increases with the level of education. This may be accounted for by the fact that programmes are often very specialised at the graduate level. Van Bouwel and Veugelers (2013) even found that the lack of opportunities to study specific fields in the home country is the driving factor for graduate students in their decision to migrate. In the UK, Belgium, Netherlands, France, and Sweden more than one third of Doctoral students are mobile and in half of the considered countries, international students make up more than 10% of Master's students. For almost all countries, the share of international students in Master programmes is higher than on the Bachelor level, however, the difference is minor. An exception is the UK, where Master's programmes seem to be particularly attractive for international students, while the share of mobile students at the Bachelor level is similar to that in other countries.

Figure 2 presents the development of student mobility between the academic years 2006/07 and

Figure 1

International Students in Tertiary Education Academic year 2014/15

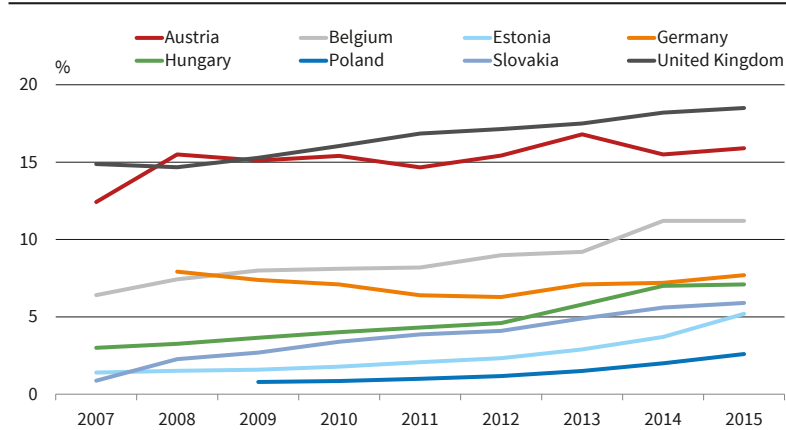


Source: Eurostat (2017a, 2017b); author's calculations.

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Figure 2

Share of International Students in Tertiary Education over Time
Academic years 2006/07–2014/15



Source: OECD (2017a, 2017b), Eurostat (2017a); authors' calculations.

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2014/15 for selected countries. An upward trend in the share of international students is visible over the presented timespan for all countries except Germany. The countries not displayed in the graph follow a similar pattern. Even in Germany, where the share of international students declined, the absolute number of international students increased by nearly 30% between 2008 and 2015 (Eurostat 2017c), and the increase in the total number of students enrolled was slightly greater (Eurostat 2017b). A large increase in the share of international students can particularly be noted for the countries in the sample which only joined the EU in 2004 and started out from a relatively low level, with an increase of 5.0 percentage points in Slovakia and 3.8 percentage points in Estonia.

OUTWARD MOBILITY

Turning to the students leaving their country for tertiary education, the share of mobile students is calculated by dividing the number of mobile students from a country, by the total number of tertiary students from that country of origin. Thereby, Slovakia, Bulgaria, Ireland, Lithuania, Latvia and Estonia rank highest with over 5% of their native student body studying abroad. However, for about half of the countries in the dataset the share of outgoing students ranges between 2–3%. The EU28 average also lies in this range, with a share of 2.8%.

Comparing Figure 3 to Figure 1, the order of countries is partly reversed. Most strikingly, the UK hosts the largest share of international students, while students originally coming from the UK show the lowest mobility. Furthermore, most countries ranking highest in Figure 3, host a low share of international students themselves, like Bulgaria, Lithuania, Latvia, Estonia and Romania. These contrary observations for the two different student mobility indicators within countries are probably due to the fact, that the university quality

(measured by rankings), cost of living, language and climate are, among other factors, significant determinants of student destinations (González et al. 2011).

Countries that are particularly attractive are likely to have a high share of international students, because their students want to stay and are therefore much less mobile.

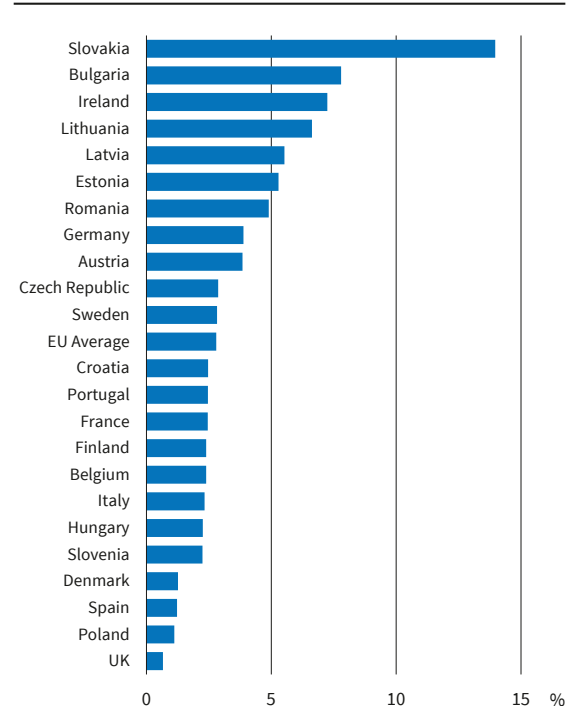
DETERMINANTS OF STUDENT MOBILITY

As quality of education is a key factor determining the destination countries for mobile students, public expenditure on tertiary education is likely to influence the share of incoming international students. Figure 4 shows the share of international students in a country and its average government expenditure (current, capital, and transfers) for tertiary education, measured as the expenditure per student as a percentage of the GDP per capita, which are indeed positively correlated.

In the graph, the countries fall into three groups. The largest group has a share of international students between about 1–6% and a public expenditure for tertiary education of about 20–30% of GDP per capita. The

Figure 3

Share of Students Studying Outside the Country
Academic Year 2012/13



Source: European Commission (2015).

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Scandinavian countries (Denmark, Finland, and Sweden) as well as Germany and France attract a larger share of mobile students and have higher government expenditures for tertiary education of over 35% of their GDP per capita. A similarly high level of government expenditure but a much higher share of mobile students can be observed for the United Kingdom and Austria. For the latter two countries the language is another key reason for the high level of mobile students; with English speaking students from around the world coming to the UK, and Austria attracting many students from Germany.

CONCLUSION

Overall, the inward and outward mobility of students greatly differs across countries and educational levels. This can be accounted for by the variation in the quality level of universities, language factors and the availability of opportunities on the Master’s and Doctoral level.

With the data available one cannot appropriately judge the current situation of student mobility with respect to the aim of a proportion of 20% of higher education students from EU countries completing a study or training period abroad. The collection of the necessary data has just begun and first estimates will be available in 2018 (European Commission 2015).

In view of the data presented in this article, however, it seems like there is still a lot of work to be done, with an EU average of 8.2% for incoming international students and of 2.8% for students leaving their country in a given year. Given the steady increase in student mobility over the period of 2007–15, however, one can assume a similar pattern for the share of students completing tertiary education that spent a study or training period abroad.

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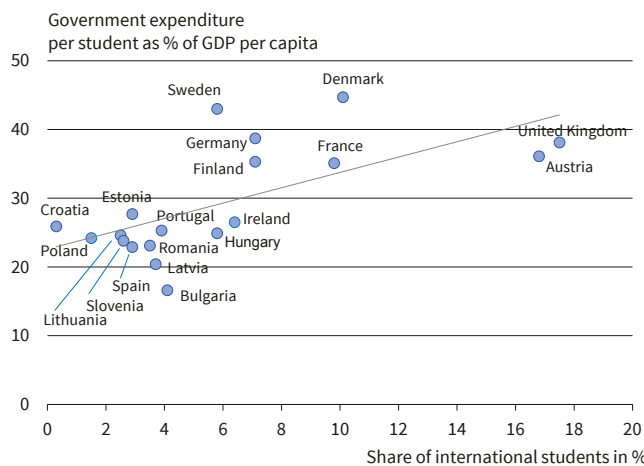
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Figure 4

Government Expenditure per Tertiary Student and the Share of International Students, 2013



Source: Eurostat (2017a); Worldbank (2017).

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Carla Rhode¹ An Economy Transitioning from Brown to Green

Our current growth model and its impact on the natural environment “threatens the foundations of long-run growth and development” (OECD 2017c). With economic growth substantially depending on natural resource inputs and our planet containing only a finite amount of these, continuous growth is not a durable concept (Vavrek and Chovancova 2016). Thus, accomplishing a growth path that is “resilient, inclusive and sustainable” (OECD 2017b) is a top policy priority of our time. Green growth has been introduced as a paradigm allowing governments to re-ignite economic growth, implement climate goals and reduce inequality, positing that “these challenges are not mutually exclusive” (OECD 2017c). The OECD has identified the current years as a unique opportunity for allowing us to bring economic growth and environment agendas together (OECD 2017c).

DEFINING GREEN GROWTH

The United Nations Environment Programme defines a green economy as one where economic growth is enabled while environmental quality and social inclusiveness are increased (UNEP 2011b). Achieving green growth as a green economy means “fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies” (OECD 2011). Besides defining green growth as a growth model which prevents environmental degradation, OECD and UNEP reports suggest that green growth has the poten-

¹ ifo Institute.

Table 1
OECD Indicator Set for Green Growth

Ambitions	Green Growth Indicators
Environmental and Resource Productivity of the Economy	Carbon and energy productivity Resource productivity Environmentally adjusted multifactor productivity
Natural Asset Base	Renewable natural resource stocks Non-renewable natural resource stocks Biological diversity and ecosystems
Environmental Dimension of Quality of Life	Pollution and environmental risks Public access to environmental services
Economic Opportunities and Policy Responses	Technology and innovation Investment facilitating dissemination of technology and knowledge Production of environmental goods Prices, taxes and transfers Education

Source: OECD 2017b; author's analysis.

tial to open up new channels of growth via productivity increases through greater efficiency of resource use, increased innovation, new markets being stimulated by demand for green technologies, stability due to reduced resource price volatility and fewer resource bottlenecks (OECD 2011; UNEP 2011b). However, even if the desirability of greening the economy is evident, the means of achieving such a transition remain to be fully understood.

The following section will consider an OECD framework which suggests that the ability to co-achieve economic, environmental and social progress depends on a country's capacity to achieve four main outcomes. These include: increasing the natural resource efficiency, maintaining the natural asset base, generating health benefits for society, while also generating economic opportunities (OECD 2017b). The OECD has developed a measurement framework identifying 26 indicators to capture the four main features of green growth. A partial overview of these is shown in Table 1.

Using this framework, the OECD report ‘Green Growth’ published in 2017 compares OECD and BRICS countries over a time period of 1990–2015, depending on data availability. Luxembourg, Iceland, Denmark, Norway and the Netherlands have achieved the highest overall results for all four elements of green growth. However, it becomes evident that while countries achieve progress towards general green growth, they mostly succeed in one dimension of it rather than leading on all fronts. For example, in 2015 Iceland received the highest results in reducing exposure to air pollution, while little improvement in material productivity was noted. On the other hand, Denmark is a leader in environmental innovation and Luxembourg ranked first for improving material productivity, however in both countries the residents are exposed to more air pollution than in Iceland and Norway, for example. Thus the top performers vary substantially for each individual element and specific indicator. The following paragraphs will investigate the progress of OECD countries in the four central elements of green growth. A closer look will be presented at the environmental and resource productivity of the economy, since “in a resource constrained world, improving productivity is the only way to sustain growth prospects in the long-run” (OECD Stat 2016).

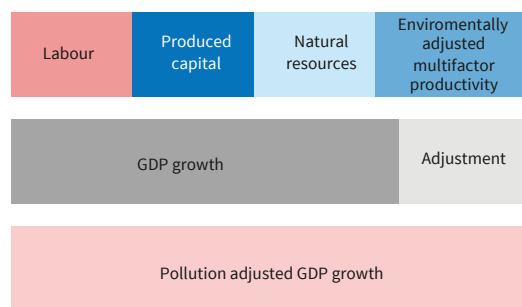
GREEN GROWTH INDICATORS

Environmental and Resource Productivity

In regards to the environmental and resource productivity of the economy, clear improvements have been made by the majority of OECD countries, but with great variation between them. One of the indicators used to assess environmental and resource productivity is environmentally adjusted multifactor productivity (EAMFP). EAMFP measures a country's ability to generate income from a given set of inputs, while accounting

Figure 1

Construction of 'Pollution Adjusted GDP Growth'



Source: OECD (2016); author's visualisation.

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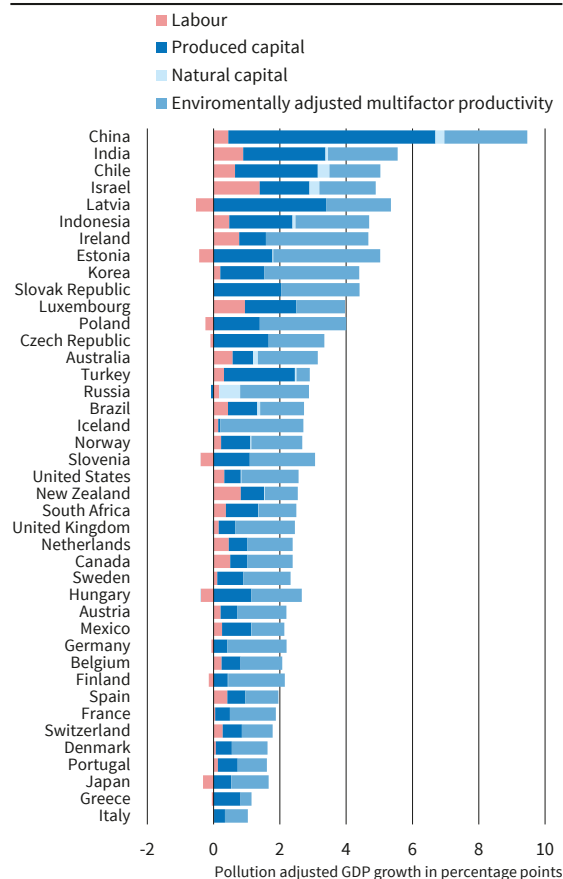
for the consumption of natural resources and production of undesirable environmental by-products (OECD 2016). Together with the usual inputs labour, capital and natural resources, EAMFP equates to pollution adjusted GDP growth. Pollution adjusted GDP growth has been introduced as a new measure, expanding commonly used GDP growth to encompass environmental aspects of economic performance. Figure 1 illustrates how the measure is constructed. The adjustment itself can occur downwards or upwards and is

based on the extent to which economic growth has occurred at the expense of environmental quality (OECD 2016).

As seen in Table 2, eight OECD countries (23%) and five BRIICS countries adjusted their GDP downwards when looking at averages from 1991–2013 (OECD 2016, author's calculations), meaning that in these countries a portion of growth occurred at the expense of environmental quality. For the majority of OECD countries (77%) and one BRIICS country, GDP growth was adjusted upwards, meaning that they managed to reduce the intensity of emissions of their economic growth. The greatest adjustment in proportion to the GDP growth level was achieved by Germany, Japan and Italy, all adjusting their GDP upwards by over 40%. Furthermore, growth accounting allows the sources of growth to be identified among labour, produced capital and natural capital. The share of pollution-adjusted GDP growth that cannot be explained by these three factors is distinguished as EAMFP. Figure 2 visualises the proportional inputs of the four factors, showing that the majority of pollution-adjusted GDP growth has been generated through EAMFP. Taking long-term averages from 1991–2013, four OECD countries exhibit a share of EAMFP of more than 80%, namely Finland with 85%, Germany with 84%, Iceland with 93% and Japan with 85% (OECD Stat 2016, author's calculations). The exact shares of EAMFP are also shown in Table 2.

Figure 2

Contribution of Inputs to Pollution Adjusted GDP Growth



Source: OECD Stat (2016); author's calculations.

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Looking at specific inputs, both carbon and material productivity of OECD economies have improved on average, meaning that more economic output is generated per unit of resources consumed. Regarding material productivity, OECD countries consumed an average of 416 kg of non-energy and 111 kg of energy material to generate USD 1000 of GDP in 2015 (OECD 2017b). At a consumption of 111 kg, the use of energy materials decreased by 22% since 2000. Regarding carbon dioxide, the average productivity for OECD countries increased by 53% from 2.55 USD/kg in 1990 to 3.91 USD/kg in 2014 (OECD 2017a). It is important to recall that these numbers are based on the carbon dioxide emissions produced in the country of reference. However, since most OECD countries are 'net importers' of carbon dioxide, one must consider demand-based productivity. Demand-based productivity is defined as the economic value generated per unit of carbon dioxide emitted during the production process of goods required to satisfy final demand. Thus it includes environmental flows embodied in imports and deducts those embodied in exports (OECD 2017b). While demand-based and production-based productivity started off at similar levels in 1995, demand-based productivity increased by only 29% until 2011, as opposed to the 35% increase of production-based productivity (OECD 2017a). Potential reasons for lower demand-based productivity increases include the displacement of energy-intensive production to non-OECD economies and the general growth of imports due to trade-related price benefits. Furthermore, progress from the

Table 2
Pollution Adjusted GDP Growth

Country	Adjustment in Percentage Points	Adjustment as a Share of GDP Points	EAMFP as a Share of Pollution Adjusted GDP Growth
Australia	-0.142	0.043	0.575
Austria	0.299	0.157	0.677
Belgium	0.272	0.151	0.606
Canada	0.027	0.011	0.565
Chile	-0.174	0.033	0.306
Czech Republic	0.693	0.272	0.519
Denmark	0.139	0.094	0.667
Estonia	0.086	0.019	0.703
Finland	0.237	0.134	0.854
France	0.309	0.197	0.740
Germany	0.685	0.475	0.838
Greece	0.078	0.077	0.300
Hungary	0.500	0.285	0.676
Iceland	0.028	0.010	0.926
Ireland	0.042	0.009	0.663
Israel	-0.264	0.051	0.347
Italy	0.303	0.418	0.670
Japan	0.415	0.449	0.843
Korea	-0.892	0.169	0.653
Latvia	0.232	0.051	0.407
Luxembourg	0.289	0.079	0.370
Mexico	-0.650	0.234	0.459
Netherlands	0.400	0.201	0.566
New Zealand	-0.091	0.035	0.392
Norway	0.194	0.078	0.574
Poland	0.065	0.018	0.693
Portugal	0.074	0.048	0.545
Slovak Republic	0.240	0.058	0.539
Slovenia	0.137	0.054	0.740
Spain	-0.084	0.041	0.508
Sweden	0.282	0.138	0.609
Switzerland	0.233	0.150	0.521
Turkey	-1.109	0.277	0.137
United Kingdom	0.334	0.160	0.746
United States	0.083	0.033	0.673
Brazil	-0.378	0.122	0.485
Russia	-0.741	0.073	0.741
India	-0.967	0.148	0.379
Indonesia	-0.252	0.051	0.473
China	0.214	0.083	0.265
South Africa	-0.170	0.064	0.457

Source: OECD Stat 2016; author's calculations.

demand perspective is more challenging since emissions per capita are highly correlated with living standards, while domestic production emissions reflect the structure and energy intensity of the economy (OECD 2017b).

Natural Asset Base

Maintaining the natural asset base is the second ambition of the OECD framework. In this regard, it is important to acknowledge that land resources make up a key component of our economy and ecosystems. Nonetheless, the market value of land greatly drives construction, and deforestation has thus harmed ecosystems and biodiversity globally. In comparison to 1990, construction now covers 30% more land, which is an increase equivalent to the size of the United Kingdom (OECD 2017b). The average change in construction area from 1990–2014 for BRIICS countries has been an increase of 65.2% as opposed to 31.6% for OECD countries. India has almost doubled its built-up area with an increase of 96.3% (OECD 2017a). With the exception of Argentina, Australia, Costa Rica, Israel, Luxembourg and Saudi Arabia, the majority of countries experience an increase in the built-up area per capita, such that the built-up area growth surpassed population growth (OECD 2017a).

Forest resources, freshwater resources, as well as biodiversity and ecosystems are also important features of the natural asset base. While the use of forest resources has been stable and managed sustainably, freshwater resource endowments vary greatly and local water scarcity remains a concern. Also wildlife and ecosystems remain threatened. Thus, the goal of balancing economic, social and environmental objectives remains.

Environmental Dimension of Life

Third, looking at the environmental dimension of quality of life, air pollution presents the primary environmental health risk worldwide. While there are various pollutants to consider, fine particulate matter (PM2.5) is a commonly studied one. The WHO Air Quality Guideline considers annual average PM2.5 exposure to be acceptable under a threshold of ten micrograms per cubic meter. Only 12 OECD countries (34%) are able to meet this standard, namely Australia, Canada, Estonia, Finland, Iceland, Ireland, Latvia, New Zealand, Norway, Portugal, Sweden and the United States (OECD Stat 2017). Among OECD countries as of 2015, Iceland has the lowest exposure with 2.9 micrograms per cubic meter and Korea has the highest exposure with 32 micrograms per cubic meter. In the OECD area, exposure to PM2.5 is estimated to cause around half a million premature deaths yearly, with an annual welfare cost equivalent to 3.8% of GDP (OECD 2017b). Thus, green growth proponents suggest that more ambitious policies in regards to air pollutants would generate growth benefits alongside environmental benefits.

Economic Opportunities

Fourth, considering economic opportunities, it is at the centre of the green growth model to develop markets

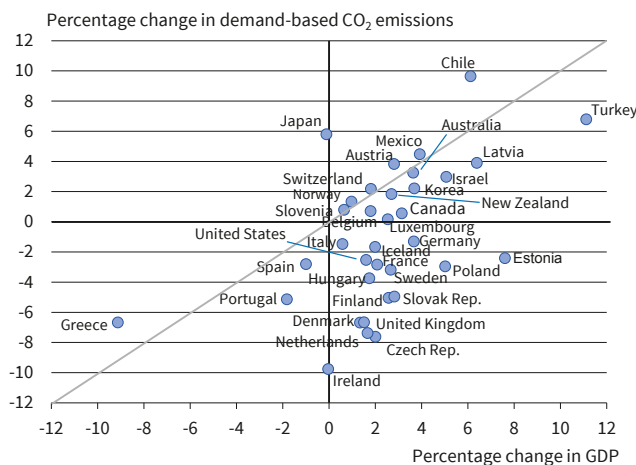
for environmentally related products, incentivise innovation across the economy and strengthen green taxation. While R&D budgets are rising, the share devoted to environmental research has remained stagnant. The majority of green inventions (90%) have traditionally originated from OECD countries, however recently the number of contributions from China and India are rising (OECD 2017b). Furthermore, trade in environmentally related products increased in more than 20 countries between 2002 and 2015 and with it the demand for pollution prevention and abatement products. Meanwhile, these countries also experienced economic growth, suggesting that trade in environmentally related products can go alongside economic success. A UNEP report argues that orienting the market towards pollution containment drives the economy in a more efficient direction (UNEP 2011b). In addition to trade, the environmental goods and services sector (EGS)² influences employment, since its share of the overall economy is growing and with it the number of jobs it provides.

CAN ECONOMIC AND ENVIRONMENTAL GOALS CO-EXIST?

While environmental concerns and considerations are rising, the question remains how successfully economic success and environmental sustainability can co-exist. A measurement of decoupling can be used as a means of evaluating the compatibility of the two goals. Decoupling is defined as “reducing the amount of resources used to produce economic growth, and delinking economic development from environmental deterioration” (UNEP 2011a). Carbon productivity is often used as the reference for environmental deterioration, while GDP growth is typically used to indicate economic success.

When assessing decoupling, one can distinguish between relative decoupling, absolute decoupling and recessive decoupling. Relative decoupling occurs, for example, when carbon dioxide emissions increase at a lower rate than real GDP, meaning that the association between growth and the environment is positive, but its elasticity is below one (Mugdal et al. 2010). Absolute decoupling on the other hand is achieved when economic growth is entirely untied from environmental pressures (OECD 2017b), such that emissions remain

Figure 3
Environmental and Economic Decoupling
2010–2011



Source: OECD Stat (2016); author's calculations.

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steady or decrease while economic growth is achieved (Burton 2015). To achieve the goal of keeping the global-temperature rise below 2°C (United Nations 2016), absolute decoupling is required. Recessive decoupling occurs when environmental and economic growth rates decrease, but the environmental emissions rate decreases more rapidly than GDP growth. These levels of decoupling and their corresponding elasticity values (e)

$$e = \frac{\% \Delta CO_2 \text{ Emissions}}{\% \Delta GDP}$$

are shown in Figure 3 for all OECD countries in 2011 (OECD Stat 2016, author’s calculations). The set-up of the diagram is an alteration of a decoupling study by Tapio (2005) based on transport volume and economic growth. Demand-based emissions are used as the environmental indicator and GDP growth as the economic indicator.

We can see in Figure 3 that nine OECD countries experience relative decoupling, 16 achieve absolute decoupling and two experience recessive decoupling. Of the remaining eight countries which do not fall into any of the previously mentioned categories, five (Austria, Mexico, Norway, Slovenia and Switzerland) lie very close to the 45° line, and can thus be considered as coupling since both the environment and the economy develop at similar rates. Three countries however, Japan, Chile and Greece achieve negative decoupling. Negative decoupling occurs when the change in the environmental measure is evaluated as ‘worse’ than that of the economy, namely: emissions increase at a faster rate than GDP (relative, Chile), both emissions and GDP decrease however GDP decreases at a faster rate (recessive, Greece), or emissions increase while GDP decreases (absolute, Japan).

It is important to acknowledge that alternative measures of decoupling, different periods of time, as

² Specific industries within this sector include waste management and sewerage.

well as different indicators for environmental change may influence the analysis and conclusions (Wang et al. 2013). Also, in addition to decoupling as a concept to promote the co-existence of economic and environmental success and a measure of their compatibility, other approaches include eco-efficiency, de-materialisation, materialisation and de-linking (Vavrek and Chovancova 2016).

CONCLUSION

The cross-thematic analysis of the four central factors of green growth, as presented by the OECD, suggest that progress towards green growth has been achieved. Furthermore, the decoupling analysis indicates that in the majority of cases this is achieved simultaneously with the maintenance of economic success. But is green growth enough, given the increasing demand, production and population levels? A UNEP report responds by arguing that, while it may be “less than business as usual” in the short run, it will “outperform business as usual” in the long run by both traditional GDP growth measures as well as more holistic GDP per capita measures (UNEP 2011b). Nonetheless, while we may combine all our efforts to incorporate environmental considerations into our growth model, resources as inputs continue to remain finite. Therefore, complementing resource-efficient policies and regulations as a society with concepts such as sufficiency and collective use is of great importance.

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Yuchen Guo and Daniela Wech¹

Trade, Jobs and Political Polarisation

Right-wing political movements and populism have recently been on the rise worldwide. In Europe, right-wing and nationalist parties, such as the Hungarian Fidesz, PiS in Poland, Front National in France and AfD in Germany are gaining power in elections. On the other side of the Atlantic, Donald Trump claimed victory in the 2017 US presidential election, after a campaign marked by nationalist and protectionist rhetoric. Indeed, one common feature among these new right-wing movements is that they are characterised by nationalism and anti-globalisation. More specifically, these populist movements are critical of trade liberalisation (e.g. TTIP and NAFTA), and appeal to the “losers” of globalisation. Indeed, since the 1980s the expansion of global trade has soared (ILO 2007). At the same time, income inequality and unemployment has increased in some countries (ILO 2007). It does not seem farfetched to suppose that there may be a relationship between these two trends. However, is trade globalisation to blame?

This article provides a synopsis of descriptive data and theoretical and empirical literature on the effects of trade on labour market outcomes and income distribution.

Firstly, we provide a descriptive overview of the development in trade volume and trends in employment among OECD countries. There does not seem to be a consistent relationship between trade and employment in the descriptive statistics. This is in line with the results in the empirical literature, since the employment effects of trade depend on regional-specific sector and worker characteristics.

Furthermore, we examine the relationship between trade and income dispersion. Our descriptive analysis reveals that the development of income dispersion somewhat parallels the positive trend of increasing trade. This observation is consistent with theoretical and empirical findings in the literature on this topic.

Lastly, we explore the political dimension of the effects of trade. Recent empirical studies find a positive association between trade exposure and political polarisation.

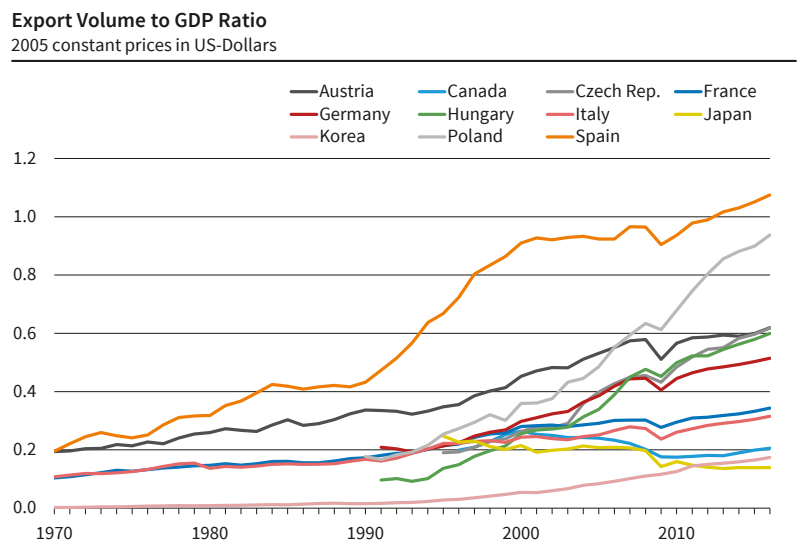
¹ ifo Institute (both).

TRADE AND (UN)EMPLOYMENT

Trade and, in particular, offshoring is often linked with the reallocation of jobs. In a theoretical model, the classical Stolper-Samuelson theorem (Samuelson and Stolper 1941), increasing trade can lead to decreasing employment, depending on the sector and skill level of the workforce. In the simplest set-up of the model, there are two countries, each relatively better endowed with low-skilled and high-skilled labour, respectively. Furthermore, there are two goods, one labour-intensive and one skill-intensive. In this setting, trade leads to a specialisation in production according to the relative endowment of human capital. Thus, the country endowed with a relatively large share of unskilled labour will specialise in the production of the labour-intensive good, which increases demand for low-skilled workers and thereby raises employment in this sector. Vice versa, the country with a higher share of skilled labour will focus on the production of the skill-intensive goods. As in the classic case of offshoring, this results in falling demand for low-skilled labour and decreases the employment rate of low-skilled workers. Thus, according to the Stolper-Samuelson theorem, trade can both increase and decrease employment depending on sector and workforce composition.

Figure 1 is a graphical representation of the development of the export volume of selected OECD countries from 1970 to 2016. For the purpose of this descriptive analysis, we restrict our analysis to export volumes and exclude net-export volumes. Our sample includes some of Central and Eastern Europe’s largest economies, as well as the NAFTA member states and Australia, Korea and Japan. For all 17 countries, the share of export volume to GDP measured at constant 2005 USD prices has been increasing. Most notably, export volume has increased almost six fold for Spain since the mid-1970s and for Poland since the 1990s. Further-

Figure 1



Source: OECD (2014).

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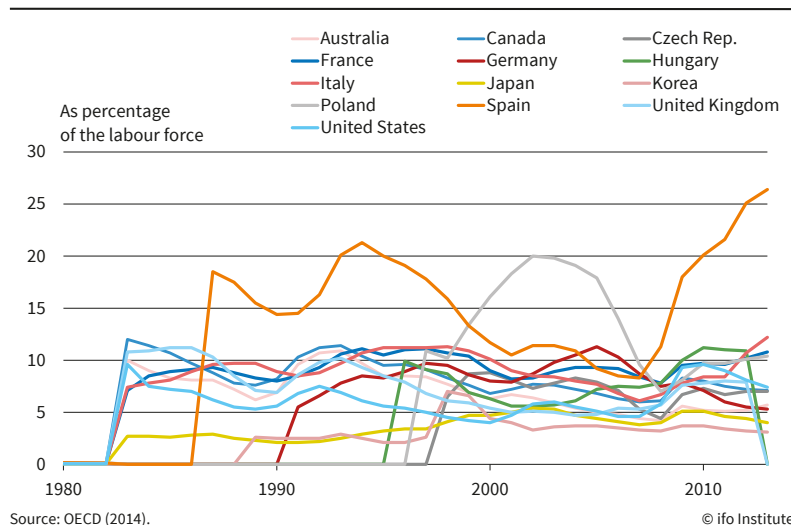
more, export volume has tripled for Germany, the Czech Republic and France since the 1990s. Although the expansion of export volume began at different points in time for the various countries, the trend of increasing export volumes is almost linear for all countries.

No such clear-cut picture emerges in the development of (un)employment. Figure 2 shows the development of unemployment rates (total, men and women) in selected OECD countries. The time-series of the unemployment rates from 1970 to 2013 does not follow a unified, positive trend. Instead (with the exception of Spain), unemployment rates follow a cyclical trend within a country-specific range. Thus, there does not seem to be an apparent relationship between trade volumes and unemployment rates, contrary to what the Stolper-Samuelson theorem predicts.

In accordance with our preliminary descriptive analysis, the empirical literature on the employment effects of trade remains inconclusive. Empirical results indicate both positive and negative effects of trade on employment rates. Dauth et al. (2014), for example, examine the effect of intensified trade between Germany and Eastern Europe and China on the German labour market between 1988–2008. Exploiting administrative panel data and using trade flows between Germany and other countries as instruments, the authors find mixed results. Regions that host import-dependent industries experienced significant job losses due to increased trade with the East. On the contrary, increasing trade exposure has positive and significant effects on the employment rate in regions specialising in export-oriented sectors. Overall, the authors estimate that the positive effect dominates in export-oriented regions, creating approximately 450,000 new jobs in Germany. The OECD finds that trade and the associated increase in foreign demand sustains a significant fraction of jobs in most countries, ranging from 7% in the US to 25% in France, Germany and Korea (OECD).

Furthermore, Autor et al. (2013a) find negative effects of trade on employment in import-dependent sectors for the US. The authors focus on the employment changes in over 700 commuting zones between 1988 and 2007 due to exposure to Chinese import competition. Paralleling the theoretical Stolper-Samuelson theorem, the authors find that intensified import exposure has a negative effect on employment, particularly for low-skilled labour.

Figure 2
Harmonised Unemployment Rates



TRADE AND INCOME DISTRIBUTION

Another dimension of the effect of trade on the labour market is wages, in particular, earnings distribution. In the theoretical set-up of the traditional Stolper-Samuelson theorem, the specialisation of skill-intensive labour increases demand for skilled workers. This causes a skill-premium in the wage and thus drives income dispersion between skilled and unskilled workers, i.e. inter-sectoral dispersion. In the data, the corresponding trend of increasing wage dispersion is observable. Recalling that Figure 1 reveals a positive and linear trend in the expansion of export volumes, Figure 3 also shows a (weak) positive trend in income dispersion, measured as the earnings ratio between the 9th and 1st decile, for both men and women.

Some countries exhibit an initial increase in income dispersion in the 1980s and 1990s and a decrease to initial levels in recent years, as seen in Australia, Hungary, Japan and Korea.

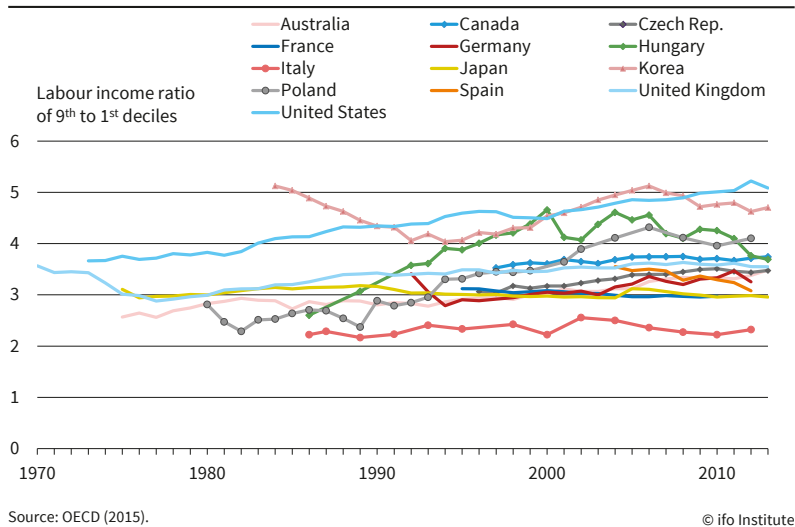
However, the income spread follows a positive trend for the majority of countries in our sample. Most prominently, income dispersion increased in the US, from a 9/1 decile ratio of 3.83 in 1980 to a ratio of 5.08 in 2013. Similar trends are observable in Canada, the Czech Republic, Germany and the United Kingdom. Overall, the trend for income spreads seems to be increasing, and is in line with the theoretical prediction of the Stolper-Samuelson theorem.

The empirical literature on this topic finds evidence of positive effects of trade on inequality for trade within sectors, rather than between sectors. This discrepancy is largely due to theoretical shortcomings in the traditional Stolper-Samuelson theorem. For instance, since only the most productive firms enter the export-market, a skill-premium is only paid for those competitive firms. The Stolper-Samuelson theorem does not account for firm heterogeneity within the

Figure 3

Earnings Dispersion, 1970–2013

Total male and female



Source: OECD (2015).

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same sector. These heterogeneities can arise from firm-specific technology shocks, differences in workforce composition or search and matching frictions in the labour market (see Goldberg and Pavcnik 2007 or Helpman et al. 2016).

Helpman et al. (2016) extend the traditional Stolper-Samuelson theorem and take matching frictions into account, and show empirically that most of the wage inequality associated with trade stems from within-sector wage dispersion. Exploiting Brazilian firm-level data from 1986–1995, the authors find that in comparison to a counterfactual closed economy, exposure to trade increases wage dispersion by 10–20% of the standard deviation of log wages in Brazil.

TRADE AND POLITICAL POLARISATION

The discussion to date has shown that the effects of trade on employment and income dispersion are ambiguous. While the effect of trade on inequality is largely positive, the effects on employment depend on sector and labour force characteristics. Nonetheless, even with regard to employment, trade is mostly found to be positive for most economies, to the extent that rightist rhetoric of job-losses due to trade is an oversimplification of the facts.

However, political radicalisation and polarisation might be a direct effect of trade itself. A recent strand of empirical literature examines the relationship between trade liberalisation and political extremism.

In a study with German data, Dippel et al. (2016) find that trade exposure has significant effects on the vote-share of parties from the extreme right spectrum. The authors use German poll data and data on import competition and export opportunities at a county-level from 1987–2009. The authors regress the change in vote-share of extreme-rightist on changes in net trade

exposure. Their results indicate that an increase by one standard deviation in import competition increases the vote-share of extreme rightist parties by 0.12 percentage points. Moreover, exposure to export opportunities significantly lowers rightist vote shares. This result parallels the results of Dauth et al. (2014), who find the corresponding effects of the different types of trade exposure on employment rates (see above). After controlling for socio economic characteristics and initial voting preferences, the qualitative results by Dippel et al. (2016) also remain unchanged.

Similarly, Colantone and Stanig (2017) find that increased trade competition from Chinese imports is positively associated with support for nationalist and radical-right parties in various European countries. The authors exploit electoral data from 1988–2007 and instrument Chinese imports to Europe with Chinese imports the US. Their instrumental variable estimates indicate to the US that about one fourth to one third of the variation in electoral success for radical political parties can be accounted for by increased import competition.

Paralleling Dippel et al. (2016) and Colantone and Stanig (2017), Malgouyres (2017) suggests that for France between 1995–2012 a one standard deviation increase in imports per worker is associated with an increase in the far-right election share of around 7% of a standard deviation.

Consistent with the above mentioned studies with European data, Autor et al. (2016) find similar results for the US. The authors analyse the effects of the increasing trade integration between the US and China on the outcomes of congressional elections 2002–2010. Autor et al.'s results indicate that districts with higher import exposure are associated with an increased likelihood of electing a conservative Republican.

CONCLUSION

Populist parties from the rightist political spectrum are becoming increasingly powerful. A common statement by right-wing extremists is that trade liberalisation is detrimental to native labour markets and increases income inequality. This article took a closer look at these claims by examining the data behind them. Our descriptive analysis and the literature on this topic indicate that trade exposure can lead to unemployment, especially in regions with increased import competition. However, the overall net effect of trade on employ-

ment rates is positive in the majority of countries in our sample. Furthermore, there is some evidence that trade exposure does indeed raise earnings dispersion. However, recent literature suggests that this is due to intra-sectoral firm heterogeneity.

Lastly, empirical studies find evidence that increasing trade exposure, and especially import competition, is directly associated with political polarisation.

Although the rightist claim that trade destroys jobs cannot be sustained by empirical findings, there is some evidence that trade increases earnings dispersion. However, inequality and distributional concerns are not only an effect of trade liberalisation, but are increasingly pressing issues of society stemming from multiple sources. In this context, trade globalisation is utilised by populists' rhetoric as a combat term. It is therefore especially important not to oversimplify things, but to highlight the complex and indirect effects of underlying the mechanisms.

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New at DICE Database

RECENT ENTRIES TO THE DICE DATABASE

In the third quarter of 2017, the DICE Database received a number of new entries, consisting partly of updates and partly of new topics. The list below features some of the topics covered by those new entries:

- Ratio of Private Credit by Deposit Money Banks to GDP
- Business Regulations: Getting Credit
- Business Regulations: Enforcing Contracts
- Growth of GDP per Capita (Current Prices)
- Enrolment in Tertiary Education
- Students Enrolled in Tertiary Education by Education Level
- Share of Mobile Students Enrolled Abroad by Education Level

The interactive graphics application [Visual Storytelling](#) has been further expanded.

Forthcoming Conferences

CEsifo Area Conference on Behavioural Economics

27–28 October 2017, Munich

The seventh CEsifo Area Conference of the Behavioural Economics area will be organized jointly with the Collaborative Research Centre "Rationality and Competition". All CEsifo Research Network members and all CRC members are invited to submit their papers for consideration. The keynote lectures will be delivered by Roland Benabou (Princeton University) and Andrew Caplin (New York University).

Scientific organisers: Professor Klaus Schmidt, Professor Dr. Ernst Fehr

CEsifo Area Conference on the Economics of Digitisation

3–4 November 2017, Munich

This event is the inaugural conference of the Economics of Digitisation Area, which is the ninth and newest area of the CEsifo Network. Submissions will be accepted from both CEsifo Network members and non-network members. The keynote lecture on digitisation, privacy, and publicly-funded research, will be delivered by Stefan Bender (Deutsche Bundesbank).

Scientific organiser: Professor Stephen P. Ryan

10th Norwegian-German Seminar on Public Economics

17–18 November 2017, Munich

The 10th Norwegian-German Seminar on Public Economics is organised jointly by CEsifo, the Norwegian Centre for Taxation at NHH, and Oslo Fiscal Studies at the University of Oslo. The organisers have invited research-

ers from all fields of public finance to submit papers. Both theoretical and empirical papers are welcome.

Scientific organisers: Professor Marko Köthenbürger, Dr. Dirk Schindler

11th Workshop on Political Economy 1–2 December 2017, Munich

CEsifo, the Centre of Public Economics at TU Dresden and the ifo Institute for Economic Research Dresden will jointly organise a workshop on Political Economy. In the tradition of the previous workshops, the conference will take place in Saxony's capital Dresden. The two-day workshop will serve as a forum to present current research results in political economy and will give researchers the opportunity to network. The keynote lectures will be delivered by Martin Paldam (Aarhus University) and Toke Aidt (University of Cambridge). Scientific organisers: Prof. Dr. Christian Lessmann, Dr. Gunther Markwardt

8th ifo Conference on Macroeconomics and Survey Data

8–9 December 2017, Munich

The ifo Center for Business Cycle Analysis and Surveys will organise a conference on "Macroeconomics and Survey Data" to be held in Munich. Ongoing research on survey and micro data and its role and usage in macroeconomics will be discussed at the conference. Papers, theoretical, empirical and policy-oriented, are actively solicited on issues like: the methodology of business surveys, uncertainty modelling, survey data and the business cycle, the transmission of cyclical fluctuations, inequality and distributional aspects, the forecasting performance of survey data in business-cycle research, usage of micro-data in macroeconomics, labour market and the business cycle.

Scientific organisers: Dr. Klaus Wohlrabe, Prof. Dr. Timo Wollmershäuser, Prof. Dr. Andreas Peichl

New Books on Institutions

The Dictator's Dilemma: The Chinese Communist Party's Strategy for Survival

Bruce J. Dickson

Oxford University Press, to be published 2018

Who Runs the Economy?

The Role of Power in Economics

Robert Skidelsky and Nan Craig

Palgrave Macmillan, 2017

Inside Job: How Government Insiders Subvert the Public Interest

Mark A. Zupan

Cambridge University Press, 2017