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Volume 14, Number 4 Winter 2016

Forum

ASYLUM POLICY

Towards a New European Refugee Policy that Works Amelie F. Constant and Klaus F. Zimmermann	3
The Common European Asylum System – the Role of Burden-sharing Timothy J. Hatton	9
Asylum Policy and Illegal Immigration: Perspectives and Challenges Alessandra Casarico, Giovanni Facchini and Cecilia Testa	14
Reform of the European Asylum System: Why Common Social Standards are Imperative Ulrich Becker and Julia Hagn	21
Germany and Global Refugees: A History of the Present Jochen Oltmer	26
Integrating Refugees into the Labor Market – a Comparison of Europe and the United States Panu Poutvaara and Daniela Wech	32
Research Report	
Estimating the Size of the Shadow Economies of Highly-developed Countries: Selected New Results Friedrich Schneider	44
On Data and Trends in Income Inequality around the World Florian Dorn	54
Reform Model	
Promoting Electric Vehicles in Germany via Subsidies – an Efficient Strategy? Claudia Kemfert	65
Preserving Government Solvency: A Global Policy Perspective Andrea Rieck and Ludger Schuknecht	71
Database	
Institutional Dimensions of Successful Labor Market Integration of Refugees Ryan Born and Maximilian Schwefer	82
The Development of Tax Transparency in OECD Countries Hoang Ha Nguyen Thi and Till Nikolka	85
The Effect of Presumed Consent Defaults on Organ Donation Jessica Li and Till Nikolka	90
News	
New at DICE Database, Conferences, Books	95

ASYLUM POLICY

Towards a New European Refugee Policy that Works

AMELIE F. CONSTANT AND KLAUS F. ZIMMERMANN¹

Introduction

In 2015 Europe, and the European Union (EU) Member States (EU-28) in particular, experienced an unprecedented surge of refugees, asylum seekers and other undocumented migrants. The EU-28 recorded 1,322,825 asylum applications² with 476,510 in Germany (36%), 177,135 in Hungary (13%), 162,450 in Sweden (12%), 88,160 in Austria (7%), and 83,540 in Italy (6%). However, unlike all public perceptions, the rise did not come overnight: 2013 and 2014 had already seen an exceptionally large number of asylum applications (see Figure 1).

This historic phenomenon triggered a serious threat to the existence of the Union and its principles.³ It certainly gave rise to populist, nationalist, and extreme political parties that seized the opportunity to pour fear into their populations and take undemocratic, anti-union, xeno-phobic, and subhuman actions. Examples are the closing of the borders against the Schengen agreements, installations of barb-wired fences, subhuman treatment of asylum seekers in detention camps, Brexit, isolationism, parochialism, active hostility and opposition among the EU-States.

While receiving masses of refugees is not a new phenomenon for countries in Europe, what made this a crisis is that the EU-28 to date has no enforcing super-national power and lacks a unified humanitarian and refugee system under which all Member States abide. Moreover, within each country, there are discrepancies in the han-

dling of refugees and asylum seekers, as well as in the proper authority in charge (national or local). The evolving notion of the nation-state and the EU's incomplete Common European Asylum System (CEAS) resulted in a chaotic, divided and finger-pointing way of handling this grave humanitarian drama unfolding on the continent and the Mediterranean Sea, with a perceived flood of refugees and thousands of deaths.

The next section outlines the differences between migrants, refugees and asylum seekers and their humanitarian rights. The following section summarizes the European refugee and asylum system, while the subsequent section studies labor market access regulations. The section following afterwards reviews the strategic European asylum policy issues and the last section offers some conclusions.

Mobility, migrants, refugees, asylum seekers and human rights

The word migrants denotes economic migrants who emigrate (leave) from their home country of their own free will to seek a better life in a foreign country. The primary motive of these migrants is jobs and money. While abroad, they enjoy protection from their home government. Refugees and asylum seekers or asylees, however, are forced to emigrate, often abruptly and overnight, fleeing war, persecution, or natural disasters and seek protection from another sovereign country abroad.

The difference between refugees and asylum seekers is that the former⁴ arrive in the host country with a pre-approved protection refugee status either from the new host country or from humanitarian organizations that also resettle them in the new host country.⁵ Asylees usually arrive in the new country as displaced people or illegal immigrants and immediately seek asylum and sanctuary by filing an application. If their application





Princeton University and UNU-MERIT (both).

² Please note that these are lodged asylum applications; the number of refugee inflows is much larger. For a deeper analysis of the asylum flow, see Wech (2016).

³ The situation has been debated among others by IMF (2016), EU (2016), Rinne and Zimmermann (2015) and Hinte, Rinne and Zimmermann (2015).

⁴ Refugees can also be stateless people according to Directive 2011/95/EU (OECD 2016a). Another category is that of tolerated residents

OECD (2016c) refers to people who have applied for asylum and have been granted some sort of protection as "humanitarian migrants"; this label includes migrants resettled through UNHCR humanitarian programs or through other private organizations (as usually occurs in Australia, Canada and the US).

is approved by the government of the host country, asylum seekers take the status of refugees.

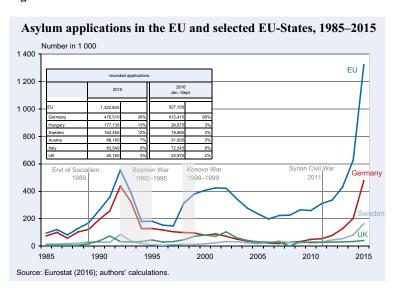
The 1951 Refugee Convention (RC) and the 1967 Protocol outline the rights of displaced people and the legal obligations that host countries have to protect them. The RC defines refugees as those who have a well-founded fear of persecution because of their race, religion, nationality, membership of a particular social group or political opinion, and who are unable to avail themselves of the protection of that country, or to return there, for fear of persecution. A key provision of the RC

is the non-refoulement, meaning that refugees should not be returned to a country in which they fear persecution (Article 33). Moreover, Article 14 of the Universal Declaration of Human Rights of 1948 states that everybody has the right to seek and to enjoy asylum from persecution in other countries.

However, the RC does not specify how individual countries determine if a displaced person fulfills the definition of a refugee. While the EU abides by the RC and perceives asylum as a fundamental right, each EU-State develops its own rules and interpretation, resulting in discrepancies and gaps among countries. Typically, the burden of proof rests with the asylee, who has to prove that (s)he left his/her home country and cannot return because of fear of persecution. If an asylee's application is denied, the host country must explain the reasons for that denial to the asylee. In turn, the asylee has the right to appeal. In almost all European countries, granting asylum is not permanent, while it varies by country from 2 to 3 years (Germany) to 5 years (the UK). Sometimes, individuals who do not qualify for asylum may qualify to stay for humanitarian reasons. This is also a temporary status.

The status that countries grant to asylees, as well as restrictions on family reunification, are often mirrored in the behavior and integration efforts made by asylees. For example, a temporary protection status and no family allowed may be perceived by asylees as a signal that they are not welcome and will soon be deported. Thus, asylees probably will not make any effort to integrate into the society of the host country. This can further

Figure 1



negatively impact natives' perceptions of refugees and create a vicious cycle.

The European refugee and asylum system

The EU asylum legislation involves various regulations: An asylum procedures directive seeks to establish a fair and efficient asylum procedure. A reception conditions directive establishes minimum standards of living conditions for asylees and ensures that they have food, shelter, employment and healthcare. Furthermore, a qualification directive establishes common grounds on granting asylum and expects rights such as residence permits, access to jobs and education, healthcare and welfare to be observed. The Dublin Convention of 1997, as well as its subsequent reincarnations (the Dublin II Regulation⁶ in 2003 and the Dublin III Regulation in 2013), determine that the EU-State responsible for accepting or rejecting asylees is the one in which the asylee was first fingerprinted. This is to prevent "asylum shopping" and to reduce the number of "orbiting asylees" from one to the other EU-State. The regulations also allow for "readmission," meaning that an EU-State can return an asylee back to the first EU-State of entry. The criteria used for the responsible EU-State are tied to: (i) family considerations/unity above all other, (ii) whether the applicant has a visa or residence permit in an EU-State, and (iii) whether the asylum seeker has entered the EU legally or irregularly. The EU asylum fingerprint database, EURODAC, of 2003 aims to "prevent, detect

⁶ The exception was Denmark, which applied it in 2008.

or investigate" serious crimes and terrorism, not only related to refugees.

Since 1999, the Common European Asylum System (CEAS) and since 2008 the Policy Plan on Asylum offer three pillars underpinning the development of CEAS: (i) harmonize standards of protection by aligning asylum legislation of the EU-States; (ii) achieve effective practical cooperation; (iii) increase solidarity and responsibility-sharing among EU-States, as well as between EU and non-EU countries. In 2011 a European Asylum Support Office (EASO) was set up to enhance cooperation among EU-States in managing asylum requests and to contribute to the implementation of CEAS. The objective is to facilitate the protection of asylees, coordinate efforts among EU-States, exchange information on countries of origin, assist in refugee relocation, and allow for a smooth transition of asylees among countries. The European Refugee Fund of 2000 provides financial support and resources to projects that integrate refugees, as well as to the reception and return of asylees. The Asylum, Migration and Integration Fund (AMIF) for 2014-2020 with a budget of 3.137 billion EUR was set up to implement and strengthen a common approach to asylum. Since 2005, Frontex has targeted cooperation between national borders and has been securing external borders according to EU rules.

In the fall of 2015 revisions were proposed to improve the Dublin Regulations (DR) and make them more functional including (i) inserting a crisis relocation mechanism clause that allows for some leeway, (ii) stipulating that the responsible EU-State would not be that of first entry, (iii) taking into consideration a common European list of Safe Countries of Origin and/or Transit as part of the criteria, (iv) introducing a permanent distribution key accounting for each EU-State's relative size, wealth and absorption capacity. Another reform proposal has been the "early warning, preparedness and crisis management mechanism." It entails alerting the EU immediately when the Dublin system is being endangered due to migration pressures and/or deficiencies in the asylum system(s) of one or more EU-State(s).7 Key aspects of the proposal were: (i) protection of applicants via compulsory personal interviews, (ii) suspension of the transfer of asylees during their appeal, (iii) supply of free legal assistance upon request, (iv) guarantee of the right to appeal against transfer decision, (v) existence of a single ground for detention and strict limitation of the detention period, (vi) stipulation that exhaustive and clearer deadlines such as the entire Dublin procedure cannot last longer than 11 months, or 9 months to return the asylee to his/her country of origin.

To allow CEAS to work well both at times of high migration, as well as at normal times, the EU Commission proposed in 2016 to (July 2016 EU Commission PressRelease8): (i) replace the Asylum Procedures Directive with a Regulation to simplify, clarify and shorten asylum procedures; safeguard common guarantees for asylees; guarantee stricter rules against abuse; and harmonize rules on safe countries; (ii) replace the existing Qualification Directive with a new Regulation to achieve a greater convergence of recognition rates and forms of protection; firmer rules sanctioning secondary movements; grant protection as long as it is needed; and strengthen integration incentives; (iii) reform the Reception Conditions Directive to ensure that EU-States apply the standards and indicators about reception conditions, as well as constantly update contingency plans especially facing disproportionate pressure; ensure that asylees remain available and do not escape by allowing EU-States to give them residence or impose reporting obligations; reception conditions will only be provided in the EU-State responsible and clarify rules about when entitlement to material reception conditions can be scaled back and when financial allowances may be replaced with material reception conditions provided in kind; let asylees work within six months after their application at the latest, and ensure that their labor market access fully complies with labor market standards; and have common reinforced guarantees for asylees with special needs and for unaccompanied minors.

In addition, the Commission proposed an EU Resettlement Framework along with the long-term policy on better migration management stated in the European Agenda on Migration. While the EU will act as a whole, it will be the EU-States that decide on the number of resettled people per year. Future resettlements will be implemented through annual EU resettlement plans, which set the broad geographical priorities from where the resettlement will take place, the maximum total number of persons to be resettled in the following year based on the participation and contributions made by the Member States and Associated Schengen countries in the specific annual resettlement plan. A European Border and Coast Guard Agency with a stronger role and command was proposed in December 2015 to replace Frontex.

http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/asylum/examination-of-applicants/index_en.htm

⁸ http://europa.eu/rapid/press-release_IP-16-2433_en.htm

It is clear that, while these are steps in the right direction, the EU lacks a common European framework, common governance and a supra-national power to impose the same rules on all of its members.

In September 2015 the EU adopted the *Emergency Response Mechanism*⁹ to distribute and relocate some 160,000 of the 2015 migrants to different EU Member States using quotas based on (i) 40% of the size of the population, (ii) 40% of the GDP, (iii) 10% of the average number of past asylum applications, and (iv) 10% of the unemployment rate. Relocation was planned to be applicable to nationalities with an EU-wide average recognition rate of 75% or higher (such as Syria and Iraq). States receiving refugees received 6000 EUR per relocated person. EU-States unable to participate in the emergency relocation mechanism were expected to contribute 0.002% of their GDP to the EU budget. However, this concept was not widely implemented due to resistance from Member States.

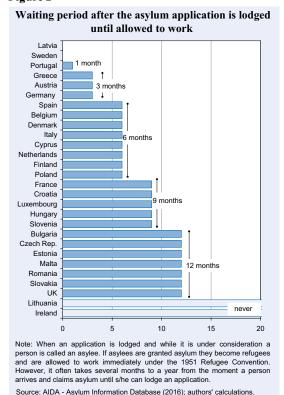
Asylees' and refugees' right to work

There is wide variation among EU-States about allowing asylees to work while their application is pending. ¹⁰ Some countries impose a time-limit, while others add labor market restrictions and institutional limitations. In most countries, asylees are not allowed to be self-employed. If asylees are granted asylum they become refugees and are allowed to work immediately under the 1951 RC. However, it often takes from several months up to a year from the moment a person arrives and claims asylum until an application can be lodged. Some countries also allow some work access during this period.

Figure 2 provides a classification and overview of the situation in the EU-28 for asylees. Immediate admission to the labor market is provided by Latvia and Sweden, while Portugal imposes a waiting period of 1 month; Greece, Austria and Germany (with some qualifications) impose 3 months. Lithuania and Ireland do not allow for work during the asylum application period. All other countries have 6, 9 or 12-month waiting periods.

In addition, there may be numerous other restrictions to taking up work, which vary substantially across countries.¹¹ For instance, in the UK the job needs to be on

Figure 2



the Shortage Occupation List, and the work permission only applies to jobs with a minimum of 30 hours/week workload that pay an occupation-specific minimum salary. Asylees in Sweden have to provide proof of their identity, need a working permit and are not allowed to work in sectors and jobs that require skills certification. In 2015, Sweden launched new initiatives such as fast-tracking in order to integrate skilled refugees into shortage occupations (OECD 2016b). In Cyprus, asylees can only work in low-skilled jobs (fishing, waste management industries, etc.). In Austria, employment is limited to seasonal work in tourism, agriculture or forestry.

In Germany, the adoption of a new law in October 2015 imposed new restrictions on the previously newly introduced 3-month waiting-period. Asylum seekers from safe countries of origin are completely excluded from access to work. All others who stay at initial reception centers also have no access to the labor market until they have reached the maximum period of 6 months of an allowed stay, and they have to leave. If they manage to leave earlier for legal or practical reasons (e.g. due to overcrowding), they may have access to work if (i) their waiting period since the asylum application was filed is longer than 3 months and (ii) they receive an employment permit from the labor office. The employment permit requires a concrete job offer by a company should the permit be granted

See http://europa.eu/rapid/press-release_MEMO-15-5698_en.htm

¹⁰ See https://www.migrationwatchuk.org/briefing-paper/316

¹¹ See https://www.migrationwatchuk.org/briefing-paper/316. The following are illustrative examples.

and a detailed job description. The job center pursues a *priority review*, to see if there is another job-seeker who is a better match for the job such as a German citizen or a foreigner with a residence permit. Job centers also carry out *reviews of labor conditions* to examine whether labor rights and wages are in line with standards.

Spatial dispersal is important for labor market integration. Typically, the early asylum procedure focuses on a strict geographic allocation of refugees with local residence obligations. Mobility within the host country, or even across EU-States, is initially ruled out. This is naturally a potential problem for taking up work and has been identified as a cause of long-term labor market integration failure. For this reason countries like Germany and Austria began to allow asylees to follow the geographical location of the acquired jobs.

Furthermore, the importance of mapping skills with labor market needs has been recognized. For instance, through *early intervention* Germany maps the skills of asylum seekers with the labor market at a very early stage. Case workers assess the asylees' competencies at reception facilities through a "work package" and the federal employment office develops individual employment strategies to match asylees' skills with local labor market needs. A similar scheme is just recently used in Finland, where interviews occur at reception camps, but matching skills are considered only after geographic settlement is chosen (OECD 2016b).

A strategic European asylum policy

The world will continue to generate conflict and asylum seekers and Europe needs to be prepared to take its fair share based on the Geneva 1951 Refugee Convention and balanced across the Member States. Having survived after reaching the soil of an EU-State, all refugees and asylum seekers also have economic motives. They want to live a good life together with their families. It is in the best interest of migrants and host countries for refugees to move as soon as possible and politically acceptable to the geographic location where they can best earn a living through work or obtain education. Those individuals not recognized as refugees need to be re-located to their country of origin as fast as possible.

Asylees and refugees are temporary migrants by definition. A substantial share of these individuals migrates

on when the situation in their country of origin has improved, or a different long-term perspective in another country comes up. However, they should have the option from the very beginning to transfer to a regular labor migration or permanent immigration scheme if they qualify. This would require a transparent immigration system, leading to a short- or long-term work permit, or even citizenship. Point systems relying on categories like job offers, education, language proficiency, labor market experiences, qualifications, and social engagement have been shown to effectively guide mobility and decisions.

The Dublin system has exacerbated imbalances among EU-States and placed enormous burdens on the Southern-European gateway countries (Greece, Italy, Malta, and Spain). Ultimately, it has turned EU-States against each other, as is the case of Germany versus Hungary and Austria. It undermined solidarity and harmony across the EU-States. It failed because, even at times of small numbers, there was neither the effective first registration and initial decision about the asylum request needed, nor any willingness on the part of other European countries to take in their fair share of asylees.

However, there is a case for an effective European asylum policy. In a common market and open society, there are so many spill-overs of costs across EU-members that make cost-minimizing strategies by coordination beneficial. Besides, Hatton (2015) argues that granting asylum to displaced people is similar to locally produced public goods. Countries provide asylum based on humanitarian principles, as well as on their legal obligations as signatories of the Geneva Convention. Knowing that refugees are protected from persecution in one country makes people in another country feel better, since they do not have to host any refugees. But if there is no cooperation between countries, this public good is underprovided.

If refugees are mainly a "burden", then a quota system seems appropriate following criteria like population size, GDP, unemployment and existing diaspora (Rinne and Zimmermann 2015). If countries take more than their fair share, they should be compensated for their extra costs from the EU budget. As Fernández-Huertas Moraga and Rapoport (2015) suggest, this can be optimized using a system of tradable refugee-admission quotas supplemented by a matching scheme that takes into account the preferences of both refugees and host countries. Some countries are willing to pay others in order to receive fewer refugees, and some countries are

 $^{^{\}rm 12}$ $\,$ See Hatton (2013) and Zimmermann (2016) for intensive discussions and reviews of this point.

willing to receive compensation for having more refugees. Therefore, a good policy that mitigates the inefficiencies inherent in free-riding is to apportion refugee quotas to countries and let them trade freely.

However, refugees are not just a burden, as people are concerned about their fate, volunteer to help and donate money. Refugees can and are willing to re-finance their costs through work, and they may be useful in the economies of the host countries; making this transparent could substantially allay public concerns about refugees. Education and the provision of work experience may emerge as effective, long-term development policies and foster trade. Refugees can also be a mobility reserve to better allocate labor within and between Member States; as migrants are perceived to be more mobile than natives and tend to follow labor market needs. This requires opening up the labor market as early as possible marking a substantial regime switch in European refugee policy, which traditionally did not allow asylees to work.

Europe should adopt a proactive strategy. Therefore, education and training such as language and other civic courses should be offered as soon as people are recorded in reception centers. In addition, adult education should be provided to those low-skilled who are ready and willing to work. Particular attention should be paid to the most vulnerable group, the unaccompanied child migrants.¹³ Besides physical health checks, countries should provide mental health check-ups starting at the reception camps. Displaced people not only flee traumatic conditions, violence and abuse, but they also go through a painful and agonizing journey before arriving in a safe host country. They often suffer from family separation, uncertainty over the success of their application, and inactivity and jobless limbo in the camps. Countries should simplify and expedite the labor market entry of asylees while they are still in reception camps. An early profiling about labor market characteristics is imperative, as is the ability to move with jobs to other geographic areas in the host countries. Refugees should be freely mobile across Europe after being granted refugee status. This would have a lasting effect on social integration and labor market success. Furthermore, host countries should mobilize the diaspora¹⁴ from the refugees' origins and involve them in the integration, acculturation and adjustment of refugees.

Conclusions

While Europe is inundated by the 2015 refugee waves, the policy responses of the European Union and its member countries exhibit signs of helplessness. The Dublin system assigning responsibility to the country of first-entry has failed. Identifying true asylum seekers effectively and distributing them fairly across Europe requests loyalty to once-accepted humanitarian standards and solidarity with the principles of Europe. A turnaround in European asylum policy is needed: commonly organized registration, selection and distribution systems have to be followed by an early access of asylum seekers to European labor markets.

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The number of unaccompanied child migrants seeking asylum in Europe reached 96,000 in 2015 (http://ec.europa.eu/eurostat/web/main/home)

main/home).

¹⁴ For an introduction to diaspora economics and its potential, see Constant and Zimmermann (2016).

THE COMMON EUROPEAN ASYLUM SYSTEM — THE ROLE OF BURDEN-SHARING

TIMOTHY J. HATTON¹

The recent asylum crisis in Europe has rekindled the debate on so-called burden-sharing, also referred to as responsibility sharing. As in the past, this has been stimulated by the very uneven distribution of asylum applications across EU countries. In this contribution I briefly outline the recent trends in asylum applications and the discussion that this has generated. I subsequently make a case for joint action in asylum policy, based on the notion that refugee hosting can be viewed as a public good. Finally I consider policy developments up to and including the present refugee crisis. I suggest that greater progress could be made by shifting away from spontaneous asylum seeking towards a substantial joint programme for resettling refugees from countries of first asylum.

Asylum applications and asylum policies

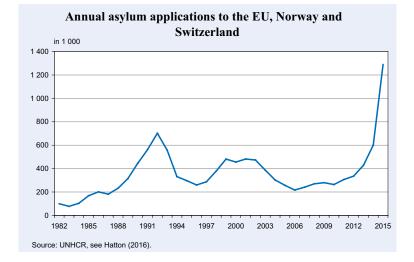
The last three decades have witnessed an unprecedented number of people arriving in European countries or at their borders in order to apply for asylum. Over that period the average number of applications received in the EU has been nearly 400,000 per year. Some individuals arrived with visitor visas, but many gained unauthorised entry by land or sea. As Figure 1 shows, the figure has fluctuated over time. The sharp peak in the early 1990s was associated with the

fall of the Berlin wall and the dissolution of the Soviet Union, which led to a surge in applications from the former communist countries, but also opened up transit routes for those from further afield. The early 2000s saw a rise in applications due to the disintegration of Yugoslavia, as well as a rise in conflicts elsewhere in the world. By far the greatest surge, however, has been seen over the last few years. Events following the Arab Spring, and most importantly the war in Syria and Iraq, have led to a steep rise in applications, which reached 1.3 million in 2015. Each of these peaks in asylum applications has prompted a wide-ranging policy debate in the EU, as well as a round of reforms.

The foundation of asylum law is the 1951 Refugee Convention. This provides the definition of a refugee as a person who has a "well-founded fear of persecution" from a specified set of causes. Each claim must be judged on its individual merits and asylum applicants must not be returned to a situation where their life or freedom would be threatened. Unauthorised entry into a country does not prejudice the outcome of an asylum claim. So, in principle, there is no limit to the number that a destination country could receive. The Convention, however, is short on detail as to how applications are to be dealt with and there is considerable latitude for policies that deter or deflect potential asylum applicants. These can be divided into three types. First, there are policies that



Figure 1



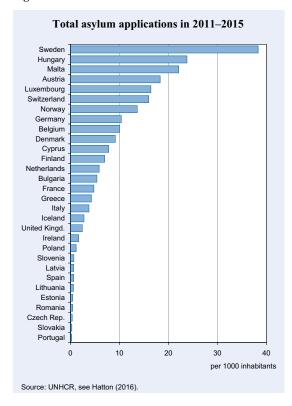
¹ University of Essex.

limit or prevent access to a country's territory, which is necessary to establish a claim to asylum. Second, there are degrees of toughness in assessing whether or not an applicant qualifies as a refugee or should be allowed to stay on other humanitarian grounds. And third, there are policies relating to the rights and conditions accorded to asylum seekers during and after the assessment of their claims.

Following the Amsterdam Treaty, effective as of 1999, competence in asylum policy was passed to the EU. In the development of the EU-led Common European Asylum System (CEAS) the main objective was to harmonise the way in which asylum policies are implemented by member states. Among the key measures were directives covering the criteria for granting asylum (the Qualification Directive), the procedures used in adjudicating asylum claims (the Asylum Procedures Directive) and the rights and conditions afforded to asylum seekers (the Reception Conditions Directive). These directives have been revised and upgraded in each of the three phases of the CEAS. And while they have led to a degree of convergence in policy, differences remain between countries in their implementation. One of the earliest agreements was the so-called Dublin Regulation, which has also gone through several rounds of revision. In order to prevent 'asylum shopping', this agreement provides that an asylum application be dealt with by one member state, normally the first country of entry into the EU. Other measures include an integrated fingerprint database (EURODAC), cooperation over border controls with the establishment of FRONTEX, and rolling out the biometric visa system (VIS) in the Schengen states.

The CEAS has concentrated on harmonising rules and procedures with the aim of ensuring that an asylum seeker receives approximately the same treatment in each member state. By contrast, much less emphasis has been placed on sharing out the burdens (or responsibilities) across member states. In the aftermath of the Kosovo crisis the EU established the European refugee fund now renamed the Asylum, Migration and Integration Fund (AMIF), which is a common financial pool to support refugee integration and provide resources to member states facing a mass influx of refugees. Shortly afterwards, the Temporary Protection Directive was introduced to relocate refugees from countries under exceptional pressure in the event of a mass influx. But it lacked a formal triggering mechanism or a formula for redistribution. Despite pressure from some countries (Italy, Malta, Greece), it has never been invoked

Figure 2



and seems likely to be abolished. In 2010 the European Asylum Support Office was established in Malta with the aim of disseminating best-practice methods and supporting states facing exceptional asylum pressures. While the office is also expected to assist in the relocation of recognised refugees, this is only on an agreed basis between member states and with the consent of the individuals concerned.

Burden-sharing would not be an issue if asylum applications were fairly evenly distributed across European countries. But they are not. As Figure 2 shows, total applications in the five years 2011-15 per 1000 of the host country population varied massively. While countries like Sweden, Hungary, Malta and Austria received a high level of applications, others in the Baltic and Iberian regions and some in Eastern Europe received comparatively few. Previous years would show a slightly different country ranking, but a similar degree of inequality. One reason for these disparities is that asylum-seeker preferences are clearly skewed towards some countries based on language and cultural affinity. This is often reflected by the size of the existing diaspora and the 'pull' effects that it generates. Another factor is ease of access to the territory, which is a particular issue for member states on the EU's external border

and which is exacerbated by the operation of the Dublin Regulation. EU policy has done little to even out the refugee burden between countries. Indeed, by constraining countries facing the largest numbers of applications from implementing tougher policies of deterrence, it may have added to these imbalances. But recent events have raised the pressure to share this burden, a point that I will deal with later.

A case for cooperation?

In democratic countries governments must pay heed to the will of their electors. Immigration policies are often framed in a way that serves the interests of host populations, either of specific individuals, as in the case of family reunification, or of the wider economy, as in the case of skill-selective labour migration. But asylum is different: refugees are admitted on the grounds of the benefit to *them* of escaping persecution, rather than on grounds of direct benefit to the host society or specific members of it. Such humanitarian motives are widespread in society and those sentiments seem to be gaining ground. That means helping those that are persecuted, even if the economic cost outweighs the economic benefit.

Hosting refugees can be interpreted as a public good (Hatton 2015). The satisfaction that one individual gets from knowing that refugees are given a safe haven does not diminish the satisfaction that accrues to other individuals from seeing the same refugees saved from persecution. Nor can any host-country person be denied that satisfaction. Thus the benefit to host-country individuals is non-rival and non-excludable – the characteristics of a public good. The same applies across countries. If one country accepts refugees, then the citizens of another country benefit from the knowledge that those refugees have found safety. But the costs fall only on the country providing sanctuary. If each country sets its policy independently such as to balance the costs and benefits to its citizens, then it will fail to take account of the benefits flowing to the residents of other countries. In such a case the public good will be underprovided. A benevolent social planner would set policies that take the externality into account. In the present context that would be the EU.

In a setting where the 'demand' for asylum places differs across countries, non-cooperative policies will also differ between countries. Those countries receiving a disproportionate number of claims will have tougher policies in order to deter enough applicants to get to the desired level. If the policies of different countries were to be set by the social planner, more refugees would be admitted, but policies would still differ between countries because they face different levels of demand. If, on the other hand, a central authority were to impose the same policy on all countries then, relative to the social optimum, some could have too many refugees and some would have too few. Thus the social optimum would not be reached.

If, as in the CEAS, policy seeks to set common standards for border control, for the adjudication of asylum claims, and for the reception conditions that asylum seekers face, then some other mechanism must be found in order to reach the social optimum for each country. One possibility is to establish a common fund in order to compensate, with a subsidy, those countries hosting a disproportionate number of refugees. This is essentially what the AMIF does, although the scale of such transfers, even in the newly beefed-up version, seems inadequate compensation. An alternative is to first set a policy to obtain what would be the optimal number for all countries taken together, and then to reallocate them to get the 'right' number for each country.

This vision of asylum policy has its flaws. One is that it is hard to determine what the overall number of refugees should be, not least because that would require some knowledge of the value of the externality. Another is the difficulty of reaching agreement in the absence of an all-powerful social planner, when individual countries have an incentive to free-ride (Facchini, Lorz and Willmann 2006). Related to that, how can the differences between countries in preferences for providing humanitarian assistance be taken into account? One possibility would be to introduce a quota trading scheme, along the lines of emissions trading schemes. The preferences of applicants for destination countries and the preferences of countries for certain types of applicants could be equilibrated by an appropriate matching mechanism (Fernández-Huertas Moraga and Rapoport 2015). But nevertheless, the uncontrolled arrival of widely fluctuating numbers in different countries is likely to present practical problems, as explored in greater detail below.

Recent events and possible reforms

As with other elements of asylum policy, political debate over burden-sharing has ebbed and flowed. In the mid-1990s a proposal from Germany to distribute individuals coming from the east fell on deaf ears. The debate was resurrected a decade later, by which time the issue had fallen under the purview of the EU. Several options were examined that proposed a distribution key, which would reflect the refugee-hosting capacity of different EU member states, and as a result, what proportion of all asylum claims would need to be transferred from one country to another. Depending on the measure of refugee-hosting capacity used, and the benchmark year chosen, the equalising share of asylum applications transferred between countries could be between 11 and 40 percent of the EU total (see Hatton 2015, 618). But the idea of implementing a redistribution scheme failed to gain traction at that time, only to be revived again by the recent migration crisis.

As the Syrian crisis unfolded, with a rising number of people crossing the Mediterranean and the Aegean in the hope of gaining asylum, the pressure for redistribution returned. In March 2015 the EU issued a draft distribution key; and in August 2015 an 'agreement' was reached to redistribute a total of 160,000 asylum applicants from Italy and Greece to other member states. It met with considerable resistance, particularly from countries in Eastern Europe. The Hungarian Prime Minister Viktor Orbán led the outcry, commenting on state radio that: "This is not solidarity. It is an unfair, unrighteous proposal which we cannot accept.... It is a crazy idea for someone to let refugees into their own country, not defend their own borders, and then say: 'Now I will distribute them among you, who did not want to let anyone in." (Associated Press 5/8/15).2 Partly as a result of this resistance, even a year later, only about 3,000 have been transferred.

Recent experience suggests that burden-sharing in the form of redistribution of asylum applicants is doomed to failure. But the theory described above suggests that there would be some optimum number for the EU as a whole; and it seems likely that this has been far exceeded by the surge of migrants seeking asylum in 2015. It is not surprising, then, that some countries facing a steep upsurge in their own asylum applications would resist taking more from other countries. In 2015 Hungary received 174,000 asylum applications — over four times the average of the previous year and 13 times the average over the five years 2010–14. Orbán's comment also points to failures of border controls in some member states as a divisive issue. What this suggests is not that

the quest for a more even distribution must be abandoned forever, but that the scale of the recent asylum crisis has made agreement on distribution all the more difficult.

It might be argued that, even if (some) governments, wishing to be seen on the world stage as upholding humanitarian values, were willing to expand their asylum seeker admissions, those that elect them are not. Yet the evidence from the European Social Survey indicates that the populations of most countries have become more favourable to refugees. The 18-country average share of respondents disagreeing with the statement "the government should be generous in judging people's applications for refugee status" declined by 14.7 percentage points between 2002 and 2014 (Hatton 2016, Table 8). However, European citizens are overwhelmingly opposed to illegal immigration and, for that reason alone, the migration crisis that in 2015 witnessed 1.82 million unauthorised crossings into the EU seems to have soured opinion. The fact that over half of asylum applicants fail to gain some form of humanitarian recognition only serves to strengthen that sentiment (Hatton 2016).

One alternative would be to shift away from the existing system of spontaneous asylum seeking in which migrants embark on risky passages in order to gain access to an uncertain prospect of getting asylum. That would involve eliminating, or radically reducing, the incentive for unauthorised entry into the EU, something that is already occurring. The agreement on 18 March 2016 between the EU and Turkey that allowed unrecognised migrants to be returned in exchange for recognised refugees has been effective in reducing unauthorised maritime arrivals to a small fraction of previous year's numbers. But tough border controls, if implemented on all the major migration routes, would deny access, not only to those with doubtful claims to asylum, but also to genuine refugees. Such policies therefore need to be accompanied by a comprehensive resettlement programme, and that requires an agreement on burden-sharing.

Resettlement programmes have existed for decades. Developed countries set quotas and refugees, whose claims to refugee status have been verified in advance by agencies such as the UNHCR, are transferred directly from camps in countries of first asylum, thus avoiding the vagaries of unauthorised migration. But the total number of resettlements is only about 100,000 per annum – a pitifully small number; and most of these are admitted by the United States, Australia and Canada. In

In the Hungarian referendum of 2nd October 2016 on whether or not to reject the EU distribution scheme, an overwhelming majority voted to reject. But it was boycotted by opposition parties and rendered invalid by the low turnout.

2012 the EU launched a programme of resettlement, but as of 2014 the total number of places amounted to just 10,000, of which one third were offered by Germany. Nevertheless the fact that 18 countries were willing to participate suggests that resettlement is firmly on the agenda. And while the extent of public support for resettlement is unclear, there is considerable support for EU-level decision-making on immigration and asylum (Hatton 2016, Table 11). Indeed, resettlement programmes have the advantage that they directly target those with the most urgent and pressing claims for transfer as refugees to the developed world. They also avoid the spectre of unauthorised migration with the concomitant exploitation, injury and death. For these reasons resettlement programmes are likely to receive greater public support. By avoiding the logistical challenges associated with spontaneous asylum seeking, they should also be easier for governments to agree upon.

In May 2015 the European Commission proposed 20,000 resettlement places over two years and in July resettlement places were pledged for 72,500 Syrians, allocated according to a distribution key. The deepening crisis also prompted a United Nations summit on 19 September 2016. Participants were expected to commit to resettling ten percent of the world's 16 million refugees, but that resolution failed to emerge. And while the communique pledged cooperation on a "global compact on responsibility sharing for refugees" the details were left to be worked out at a further summit in 2018 (UN General Assembly 2016). That was followed the next day by a summit of world leaders at which commitments were made to increase financial support for refugees and to double the number of resettlement places offered by developed countries. Much, however, remains to be done and that can only be achieved by an authority with the legislative power to act as a social planner. Given that the refugee crisis has unfolded on Europe's doorstep, the EU and its associated states are best placed to take the lead.

Conclusion

There is strong case for burden-sharing in order to boost Europe's humanitarian efforts and achieve a more equitable distribution of refugees. However, there are practical and political impediments to making progress under the present system of spontaneous asylum seeking. A joint resettlement programme is more likely to meet with success, but there is a long way to go and the EU must take the lead.

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Asylum Policy and Illegal Immigration: Perspectives and Challenges¹

Alessandra Casarico², Giovanni Facchini³ and Cecilia Testa⁴



Restrictive immigration policies, and difficulties in enforcing them have led many destination countries to harbor large swathes of people who have crossed national borders in ways that violate their immigration laws (Facchini and Testa 2016; Casarico, Facchini and Frattini 2015). These individuals are commonly referred to as "illegal", "irregular" or "undocumented" immigrants.

There are three main pathways into irregular migration. First, foreign nationals might remain in the destination country longer than their visa legally entitles them to (visa over-stayers). Second, individuals might succeed in covertly crossing national borders, often aided by professional smugglers. Third, foreigners might seek asylum in a country, and when their claim is refused, not leave it. We will refer to this population as failed asylum seekers.



Estimating the number of undocumented migrants living in any given country presents an array of challenges, as clearly discussed by Hanson (2006). Identifying the relative importance of the three pathways into illegal immigration highlighted above is even more challenging. Several observers, however, have forcefully argued (Gordon et al. 2009; Triandafyllidou 2009; Hatton 2011) that, in the case of many Western destinations, failed asylum seekers represent a large proportion of illegal flows, and in many European countries they are the main addition to the existing stock of undocumented immigrants.

We thank Michela Pizzicannella for excellent research assistance.

Our goal in this article is to study the link between asylum policy and illegal immigration. We will start by reviewing the process whereby populations at risk can file for protection under the rules laid out in the 1951 Geneva Convention on Refugees. We will then present descriptive evidence on the flows of asylum applications filed in Western destination countries between 1985 and 2014, and on protected status recognition rates, focusing on the rejection decision over time and across the main destination countries. We will finally review what happens to rejected asylum applicants, i.e. we will investigate to what extent the lack of recognition translates into removals. The last section concludes by providing a series of policy recommendations to break the link between asylum applications and illegal immigration.

Asylum seeking under the Geneva Convention

In the aftermath of the Second World War, based on Article 14 of the 1948 Universal Declaration of Human Rights, which recognizes the right of persons to seek asylum from persecution in other countries, the United Nations Geneva Convention Relating to the Status of Refugees provided a clear definition of a refugee, of his/her broad rights and of the member country's obligations. Initially intended to cover individuals fleeing persecution in Europe up to 1 January 1951, the provisions of the Convention were made permanent and universal with the 1967 Protocol.

According to the Convention a refugee is someone who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it". Thanks to the non-refoulement provision (art. 33), host countries are prevented from returning a refugee against his/her will to a territory where s/he fears threats to his/her life or freedom.

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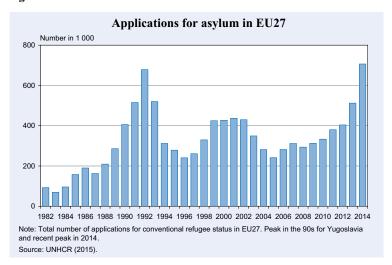
While this international agreement introduced some important general principles, the actual recognition of protected status is left to the individual signatories. Furthermore, several European countries, to deal with large, sudden inflows of applicants (e.g. as a result of conflict in the former Yugoslavia during the 1990s), have also introduced a series of temporary/subsidiary protection measures, which typically resulted in groups of displaced individuals being granted protection, but without any guarantee of permanent asylum. Moreover, to avoid "asylum shopping" (see Facchini,

Lorz and Willmann 2006), the Dublin convention agreed by EU member countries in 1990 – and its subsequent incarnations – established the principle that the application for asylum should be dealt with by one state only, usually that where an asylum seeker's fingerprints have been stored and s/he has lodged an asylum application. This principle, however, has recently come under pressure, as EU border countries have allowed asylum applicants to transit through their territory, without fingerprinting potential asylum applicants not intending to remain in their territory.

To understand the link between asylum policy and illegal immigration, it is important to review the process whereby a displaced individual can apply for protection (for more details, see Dustmann et al. 2016). We can distinguish two main routes that are available to someone who has been forced to leave his/her country of origin. First, s/he can look for protection in a neighboring country – often a developing country. Once there, s/he can remain in this "first asylum country" with some "refugee like" status – typically in large camps, under fairly basic living conditions. If s/he is lucky, refugee status may instead be recognized by UNHCR, and the individual can then be resettled in a third country, willing to accept him/her. The resettled population is very small though: on average between 1982 and 2014 only slightly over 4,100 individuals per year were resettled to EU countries, whereas large numbers of asylum seekers remain in camps in first asylum countries, often for very long periods of time.

A second route – which has been at the forefront of media attention in Europe over the past few years – instead

Figure 1



involves trying to reach a more advanced destination country immediately (typically a rich signatory of the Geneva Convention) and apply for asylum there. If the application is successful, the individual will be granted some protected status, and will be entitled to various welfare state benefits. If the application is not successful, the individual will turn into what we will call a "failed asylum seeker", and is not legally entitled to remain in the country. As discussed before, failed asylum seekers often represent a large proportion of the undocumented immigrants living in a destination country.

Asylum applications in Europe

Figure 1, based on our calculations using data taken from the UNHCR Statistical Yearbook, describes the evolution of asylum applications to the EU 27 countries between 1982 and 2014, the last year for which systematic, consistent information is available.⁵ As we can immediately see, the number of applications exhibits substantial volatility over the period, from a minimum of 70,000 in 1983, to a maximum of 706,000 in 2014, a figure that exceeds the previous peak registered in 1992 at 678,000.

Looking at the data by decade (see Figure 2), the figures appear more stable: between 1985 and 1994 3.4 million applications were lodged, and a similar number was also filed between 1995 and 2004. Between 2005 and 2014

For Eastern European countries data are only available from 1990 onwards. UNHCR population statistics also provides data for 2015, but the series from the UNHCR statistical yearbook and from the UNHCR population statistics are not fully consistent over the time period considered.

Figure 2

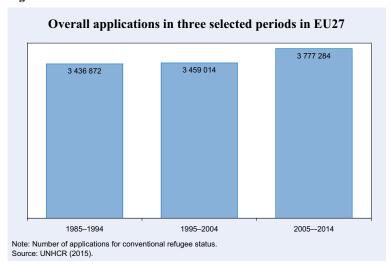
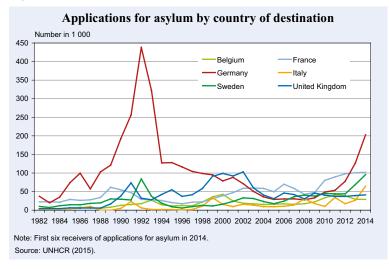


Figure 3



the figure increased to 3.7 million, although as reported by the media, further large inflows took place in 2015 and 2016. As shown in Figure 3, throughout most of the period under consideration, Germany was the main destination of asylum applicants (on average slightly over 103,000 per year). France and the United Kingdom received instead approximately 46,000 and 40,000 respectively. Sweden received only 28,000 applications per year, but in per capita terms, was by far the first destination of asylum seekers.

Applicants typically originate in countries that have experienced violence, conflict, wars or natural disasters. As a result, over the three decades considered in our analysis, we can observe some important changes in the source countries. As shown in Figures 4a-4c, be-

tween 1985 and 1994, the main sources were in Eastern Europe (Yugoslavia, Romania, Poland and Bosnia) and Asia (Turkey, Iran and Sri Lanka). Non-European sources, by contrast, became more important between 1995 and 2004, with Iraq, Turkey, Afghanistan, Iran, Somalia and Sri Lanka playing a key role. This trend was further reinforced between 2005 and 2014, and accompanied by a growing fractionalization among origin countries.

Recognition patterns vary over time and across countries

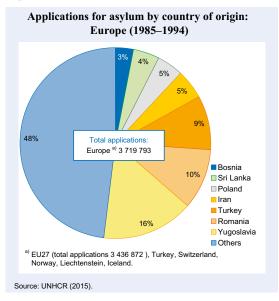
As pointed out previously, the Geneva Convention details the attributes of a refugee, highlighting the basic requirements that an individual should fulfill in order to be granted protected status. At the same time, large discretion is left to the receiving countries when it comes to the process through which asylum applications are examined.

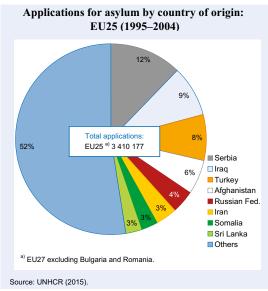
The granting of protected status is often a long and uncertain process, which can involve several stages. The UNHCR collects detailed information on decisions

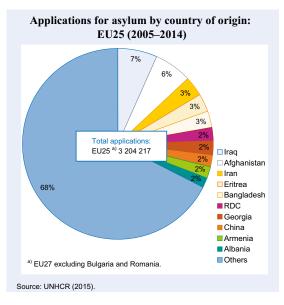
reached in any given year. In Figure 5 we illustrate the average number of months required to process applications between 1982–2014, computed using information on applications and decisions in a given year. As we can see, there is large variation across countries. While for several countries the average processing time is well above a year, reaching a peak of almost two years in Belgium; in others – like France and the Netherlands – applications are processed more promptly with an average waiting time of about eight months.

What is the typical outcome of the asylum application process? The first interesting observation to be made is that the variability in the number of asylum seekers highlighted in the previous section is only partly matched by the variability in the number of individ-

Figures 4a, 4b, 4c



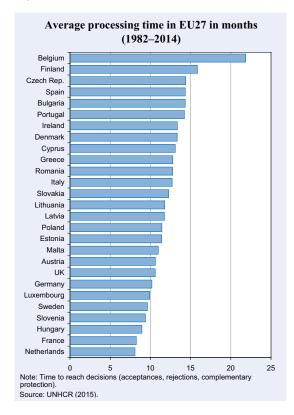




uals granted asylum or complementary protection. In fact, while the fraction of cases where individuals are allowed to remain under asylum or complementary protection is relatively stable over time, we can observe larger fluctuations among the shares of negative decisions (see Figure 6). The result is that rejection rates have varied substantially over time, from a bottom of 36 percent in 2005, to a peak of 78 percent in 1990 (see Figure 7). This outcome may be due to one of two reasons: first, the characteristics of individual asylum seekers may vary over time, and make rejection rates fluctuate accordingly. Under this scenario rejection rates increase when there is, for instance, an increase in the number of economic migrants who try to use the humanitarian channel to enter rich destination countries. Alternatively, destination countries may actually vary the extent of their commitment to the principles of the Geneva Convention, depending, for instance, on the overall flow of applications they receive; and/or on domestic political economy factors, that little have to do with the altruistic nature of the principles spelled out in the Universal Declaration of Human Rights.

The extent to which destination country specific factors are at work becomes apparent when we look at rejection rates for the six main destination countries in the EU 27 (see Figure 8). According to the UNHCR Statistical Yearbook data, France has implemented the strictest policy stance, with on average three quarters of the applications being rejected between 1982 and 2014. The United Kingdom, on the other hand, has been more generous, and on average 45 percent of the asylum applications filed in that country received some sort of positive response. Germany and Sweden have average rejection rates in the 50-60 percent range, whereas Italy and Belgium make it more difficult to obtain protected status, with rejection rates between 60 and 70 percent. Interestingly, acceptance rates have fluctuated significantly over time, within the same country (see Figure 9). In the early 1990s the UK had an almost open door to asylum applicants, with rejection rates in the single digit range. By 2004 a much stricter policy stance was in place, with rejection rates reaching over 70 percent. Less extreme, but substantial fluctuations can also be observed in France, where rejection rates in the early 1980s were fairly low, ranging between 30 and 40 percent, but where starting from the mid-1980s onwards, they have consistently exceeded 70 percent, and peaked at 88 percent both in 1990 and in 2012.

Figure 5



Rejected asylum seekers

What happens to rejected asylum applicants? This is a key question if we wish to understand the link between asylum policy and irregular immigration.

As mentioned above, the time taken to reach a decision on an asylum case varies substantially across countries. The same holds true for the rights enjoyed by an asylum applicant in the destination country while his/her case is being scrutinized (OECD 2016). Time spent in the host country, and access to the labor market, are likely to play an important role in shaping the ability to enforce the asylum policy stance. In particular, the timeliness of the asylum decision process is crucial, since the longer it takes for an application to be examined, the less likely the removal of unsuccessful applicants becomes (Facchini and Testa 2016).

If a final negative decision is reached on a given case, the rejected asylum applicant should leave the country where the asylum claim has been filed. How often does this happen? Data on involuntary repatriations is sparse. The very fact that destination countries do not systematically publish information on the enforcement of asylum decisions (Facchini and Testa 2016) suggests that this is a very controversial issue. For the few cases for which information is available, the stylized fact is that rejection decisions are poorly enforced, if at all. For example, Gibney and Hansen (2003) report the number of involuntary returns for Germany over the period from 1993 to 2000 and for the United Kingdom between 1996 and 2000. Strikingly, only 22 percent of rejected asylum seekers in Germany faced deportation. In the United Kingdom the share was even lower at four percent. Even after accounting also for voluntary repatriations, Hatton (2011) finds that less than 20 percent of the rejected claimants left the country between 1997 and 2001, and the same holds true for just over a third between 2002 and 2006.

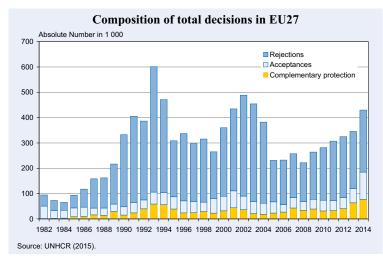
The result of poor enforcement is that failed asylum

seekers are very likely to end up adding to the stock of illegal immigrants, and in many cases failed asylum represents the most important pathway into undocumented immigration. Gordon et al. (2009), for example, estimate that failed asylum seekers accounted for two thirds of the illegal migrants present in the UK in 2001.

Breaking the link between asylum and illegal immigration

Our short review of asylum seeking has highlighted several

Figure 6



important stylized facts. First, European countries have convoluted processes in place to assess asylum claims; second, they reject a large majority of asylum claims; and third, they are fairly secretive when it comes to reporting what happens to failed asylum seekers. The existing evidence for the few hosts who publish data on policy enforcement indicates that the latter is less than perfect. The result is a strong link between asylum seeking and illegal immigration in many host countries. This is hardly a sustainable situation in a world where, on the one hand, conflict is widespread, and on the other, many destination countries are facing a huge political backlash against globalization in general, and immigration in particular. In the light of these considerations, what kind of policies could help address this impasse?

First, policy makers should draw a clear distinction between asylum seeking and economic migration, and design and implement different policies to tackle the two issues. The main goal of asylum policy should be that of offering protection to individuals whose life is at risk in the origin coun-

try because of temporary, well-defined "shocks". This is a moral obligation the Western World has assumed and should be considered as such. It is important to keep this moral obligation distinct from short-term economic considerations. In other words, asylum policy should not be a means of recruiting workers whose skills are not available in the destination country's job market. Statements like "German companies see refugees as an opportunity" are likely to be counterproductive, as they tend to mix economic and moral arguments.

Asylum countries should be generous in granting protection, and should make an assessment of the objective conditions of the applicants in the source country. Domestic political economy considerations should

Figure 7

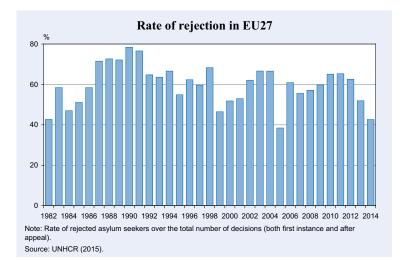
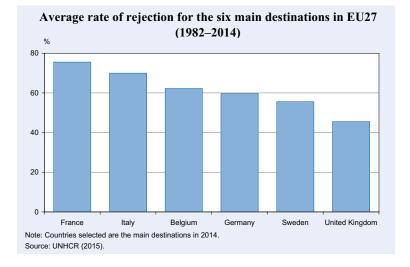


Figure 8



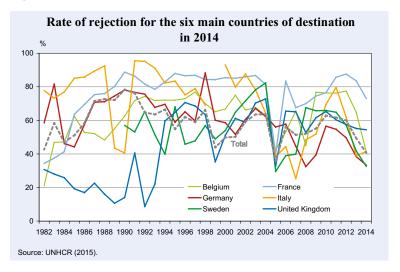
instead not be at the center of the decision making process. The examination of applications should also be carried out swiftly. Long waiting in a legal limbo is bad for applicants, but it is also bad for the destination country, which will face growing difficulties in enforcing asylum policy (and possible rejection decisions) if cases drag on for years.

Coordination among European countries must be prioritized. The current "beggar your neighbor approach" undermines trust among European countries and could shake the very foundations of the European project. All European countries, including the most recent members of the EU, must accept the idea that asylum policy has to be designed as a European policy: the economic and long-run political arguments supporting this case are too strong to be neglected due to short-term concerns.

⁶ See Dettmer (2015).

Last but not least, the outcome of the asylum assessment process must be enforced. As discussed, forced repatriations are very uncommon. Removing a failed asylum seeker is very costly from the point of view of the host country, and the result is that financially constrained enforcement agencies simply omit to carry out their mandates. This creates perverse incentives, as economic migrants end up abusing and undermining the asylum system to set foot into a rich country to try to better their position. A more open economic migration policy may instead address this issue.

Figure 9



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REFORM OF THE EUROPEAN ASYLUM SYSTEM: WHY COMMON SOCIAL STANDARDS ARE **IMPERATIVE**

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The Common European Asylum System is occasionally referred to as a "lottery of protection". This allegory points to considerable divergences in refugee recognition rates among EU States, which can hardly be explained by the mere peculiarities of individual cases. During the period between January and September 2015, for instance, the recognition rates for asylum seekers from Afghanistan varied from almost 100% in Italy to 5.88% in Bulgaria (Eurostat). Countries also varied in the type of status they granted to asylum seekers. Data from the European Asylum Support Office (EASO) for the 2nd quarter of 2015 revealed that some countries awarded refugee status to almost all Syrian nationals, such as Germany (99%), Greece (98%) and Bulgaria (85%); whereas others primarily awarded the status of subsidiary protection, such as Malta (100%), Sweden (89%), Hungary (83%) and the Czech Republic (80%) (European Commission 2016a, Fn 12). There are two important differences in the way that these two statuses affect the rights of the status-bearers. First, each status impacts the right of status-bearers to remain in the country of refuge. Second, they affect the range of rights that status-bearers may enjoy while living in the host country.

The "Refugee status" comes from the Geneva Convention on Refugees of 1951 (with the Protocol of 1976) and requires that a person with a "well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality"

(Art. 1 A No. 2 Convention Relating to the Status of Refugees). "Subsidiary protection", by contrast, covers all cases in which the refugee status is not applicable, particularly due to the absence of a specific motive for persecution, but in which people face a "real risk" of suffering "serious harm" in their home country. Such risk includes a "serious and individual threat to a civilian's life or person by reason of indiscriminate violence in situations of international or internal armed conflict". Today, both forms of protection are referred to as "international protection" rather than "asylum" because the term "asylum" was traditionally reserved for refugees in the stricter sense (Becker 2016, 82).

Although, according to the treaties upon which the EU is legally based, a Common European Asylum System (CEAS) should exist, it does not. To date, the Member States have not yet agreed on a coherent approach for dealing with the high influx of migrants seeking protection in the EU. Moreover, the System revealed serious shortcomings as recently as in 2015, when approximately 1.2 million applications for asylum were filed in the EU (Eurostat 2016). The high volume of applications for asylum ultimately triggered a complete breakdown of the Dublin system. With the number of refugee arrivals increasing, the border-states were no longer willing or able to take responsibility for the asylum seekers entering the EU, despite having the duty to do so pursuant to the Dublin III Regulation. In the Schengen area, an area with open borders, this situation led to largely uncontrolled migration and secondary movement. As a result, the distribution of refugees among EU Member States was very uneven³ and prompted states like Sweden and Austria to close their borders.

The existing EU law on asylum is based on four pillars, which were established for the first time around the turn of the millennium and were reformed some years ago, albeit before the significant increase in refugee numbers. The four pillars relate to all major aspects of granting international protection. The first is the Qualification Directive (Directive 2011/95/EU;



Max Planck Institute for Social Law and Social Policy (both).

For example by Christine Langenfeld, chairwoman of the Expert Council of German Foundations on Integration and Migration in ZEIT ONLINE, as well as by the Refugee Council.

In 2015, 80.5 percent of first-time asylum seekers were hosted by only six EU States, notably: Germany (35.2%), Hungary (13.9 %), Sweden (12.4%), Austria (6.8%), Italy (6.6%) and France (5.6%) (Eurostat 2016, 2).

European Commission 2011), which defines both the requirements for international protection and the fundamental rights associated with having been granted a protective status. The second is the Asylum Procedures Directive (Directive 2013/32/EU; European Commission 2013a), which addresses the procedures involved in the granting and withdrawal of international protection. Third, the reception of asylum seekers is governed by the Reception Directive (Directive 2013/33/EU; European Commission 2013b). Fourth, the contentious Dublin III Regulation (Regulation (EU) No 604/2013; European Commission 2013c) determines which Member State is responsible for adjudicating an asylum application, and accompanying regulations establish registration requirements for asylum seekers (the Eurodac Regulation, Regulation (EU) No 203/2013).

To address the systemic weaknesses of the CEAS, the Commission has recently proposed reforms. It suggests transforming two Directives (Qualification Directive and Procedure Directive) into Regulations, which, upon entering into force, would be automatically and uniformly self-executing in all EU countries without the need to enact national laws. The line of reasoning is that the regulation's direct applicability will massively boost the convergence of asylum policies among Member States (European Commission 2016a, 4; European Commission 2016b, 3–4). However, the distinction between these two regulatory instruments, regulations and directives, has already diminished to some extent through the practice of Community law.⁴

The first aim of the reform is to prevent secondary movement and "asylum shopping" (European Commission 2016c, 3) within the EU. To this end, recasting the Dublin III Regulation envisages that an asylum seeker has to file his or her application in the country of first entry, and may not move to another country under any

circumstances while his or her application is under adjudication.5 Accordingly, an applicant for asylum or subsidiary protection is only entitled to the benefits and conditions guaranteed by the Reception Directive in the Member State where he or she is required to be present, which is generally the country of first entry, except when emergency health care is needed. (European Commission 2016c, Art. 5 (3) and European Commission 2016d, Art. 17a (1)). All proposals assert that disparities in the range of rights enjoyed by asylum seekers in various Member States "can create incentives for applicants for international protection to claim asylum in Member States where those rights (...) are perceived to be higher than others" (European Commission 2016a, 4), thereby creating pull factors and ultimately leading to an uneven distribution among the Member States (European Commission 2016d, 1).

This argument has a lot in common with the welfare magnet hypothesis, which suggests that welfare systems are potential pull factors for migration. Borjas (1999) first formulated the welfare magnet hypothesis, where he argued that immigrants will settle down in states that offer the highest benefits. Razin and Wahba (2011) specify the hypothesis by demonstrating that it can be particularly expected in free-migration regimes, where migrants are free to self-select. Even though Borjas' model does not take into account other relevant determinants of immigration, such as immigration policy (Giulietti and Wahba 2012, 8-9), the fact that welfare systems can play a significant role in selecting a destination country cannot be ignored. Therefore, it is imperative that Member States maintain relatively comparable reception standards.

There is a second reason for ensuring common reception standards that guarantee a dignified standard of living: A Member State may transfer an asylum seeker back to a previously traversed Member State if existing regulations oblige the latter to complete the determination of the asylum seeker's status. This procedural obligation would be strengthened by the proposed reform of the Dublin III Regulation whereby the first responsible Member State – usually the country of first entry – would remain responsible. No longer would the responsibility to determine an asylum seeker's status shift 12

A directive is only intended to indicate the required result, while affording discretion to the Member States as to the form and methods of implementation (Art. 288(3) Treaty on the Functioning of the European Union). However, there are nonetheless many directives that feature extremely detailed provisions. Such directives leave the national legislator with limited discretion, so that lawmakers may only determine the type of domestic norm within which to cast a predetermined text that has already been set out in detail by the directive. Moreover, according to the case law of the European Court of Justice, provisions in directives can also have a direct domestic effect where they have not been transposed in due time, but are sufficiently precise and unconditional in their content and their ability to identify intended subjects. There is, furthermore recognition of a general obligation on the part of national authorities and courts to take into account directives that have not yet been transposed when interpreting national law. If individual directives are similar to regulations in their effects, then there are also examples of regulations that do not take their typical form as a complete and directly binding norm. This is particularly true in cases where the norms contained within a regulation cannot be given effect without the promulgation of further implementing provisions (Schwarze, Becker and Pollak 1994, 32-4.)

This prescription is accompanied by restrictions on the freedom of movement foreseen in the new Reception Directive. For example, in the event that an applicant has been assigned a specific place of residence, but has not complied with this obligation, and where there is a continued risk that the applicant may abscond, a Member State may detain the applicant in order to ensure the fulfilment of the obligation to reside in a specific place (European Commission 2016d, Art. 8 (3)(c)).

months after the date that he or she irregularly crossed the border (European Commission 2016c, Art. 15).

However, automatically returning an asylum seeker to the responsible Member State as a matter of course would be legally invalid if a responsible Member State were not to guarantee refugees a dignified standard of living while they undergo the asylum procedure. Such a situation would be inconsistent with the obligation of all EU Member States to observe the rights enshrined in the European Convention on Human Rights. No state may transfer a person seeking protection back to a state wherein the treatment of applicants is so deprived that it violates human rights law. Consequently, however, a state could evade its obligation to grant protection to asylum seekers by withholding minimum social protection from the applicants. EU bodies should respond accordingly by enforcing human rights law in all Member States. Ultimately, however, the solution will determine on whether all EU States accept their responsibility to safeguard social standards and take practical steps in that direction (Becker 2016, 83-4).

The establishment of common reception standards, however, is still in its very early stages. For the time being, a veritable patchwork of regulations and provisions prevails in Member States. The range of services provided by national legal orders is rather wide and varies according to type, modality and scope. Services also vary in accordance with the stage of the asylum procedure or the type of procedure in question (accelerated procedure, regular procedure, Dublin procedure). This was the result of a comparative legal analysis carried out at the Max Planck Institute for Social Law and Social Policy.6 The study included the southern European border states of Spain, Italy and Greece, two states located on the so-called Balkan route (Hungary and Bulgaria), Germany's most important neighbouring states (France, Austria, Poland and the Netherlands), and the United Kingdom, Sweden and Turkey. It concentrated on the social rights of persons seeking protection during the recognition procedure, specifically in relation to four areas: accommodation, ensuring the means of subsistence, healthcare and access to the labour market.

As far as accommodation is concerned, it is common for Member States to restrict the residency or movement of asylum seekers during their asylum procedures.

Countries varied in their use of the three accommodation options provided for in the EU legislation, namely the "premises used for the purpose of housing applicants during the examination of an application for asylum lodged at a border or in transit zones", "accommodation centres" and "private or other premises adapted for housing applicants". Although some specifications govern the quality of accommodations, practical difficulties remain in providing suitable accommodation for all asylum seekers. However, in almost all countries, and particularly in those receiving higher inflows of refugees, the quantity of accommodation is insufficient. This is due to inadequate preparation in many countries for the high volume of claims for international protection. For this reason, the draft for a reformed Reception Directive provides that Member States establish, and regularly update, contingency plans, which specify the measures that would foreseeably ensure adequate reception of applicants in the event that "the Member State is confronted with a disproportionate number of applicants" (European Commission 2016d, Art. 28 (1)).

In terms of the material conditions of reception, an "adequate standard of living" is the requirement applicable under EU law. Compliance with this standard presupposes that asylum seekers are guaranteed an adequate standard of living along with the protection of their physical and psychological health. In ensuring subsistence, a considerable number of countries tend to make use of the possibility of establishing different levels of support for their own and foreign nationals. In many places, this practice is evidently linked with the risk of failing to comply with the subsistence level.

The provision of healthcare services appears to be somewhat more favourable. Different regulatory approaches can be observed here, which are based on residency and ultimately give rise to three different situations. First, under some legal orders, asylum seekers can claim the same services in terms of medical treatment as the citizens of the country in question (for example in Italy, Poland and the United Kingdom). Second, as for the provision of basic services, asylum seekers only have access to basic medical care, which is not necessarily equivalent to the national catalogues of basic services, as this is the case in Bulgaria. Third, in some countries the right to treatment is limited to acute care (in Germany and Sweden, for example). Incidentally, the circumstances in Germany have already demonstrated that when it comes to healthcare services, what matters most is the actual provision of care, which operates far from smoothly. Furthermore, access to the healthcare

⁶ The results were published in the journal "Zeitschrift für ausländisches und internationales Arbeits- und Sozialrecht" (ZIAS) 1/2015 and 2/2015. The further explanations relate to the results of the study, which are summarised in Becker and Schlegelmilch (2015).

system depends on the proper registration of asylum seekers, which was not always performed in some countries. Consequently, some asylum seekers were not in a position to claim the health services for which they were theoretically eligible.

As for access to the labour market, obstacles clearly exist in most Member States. EU law currently offers many options to the Member States in this regard: access must only be provided to asylum seekers after nine months and only if no prior decision has been made on their application for protection. The priority given to EU citizens and third-country nationals with rights of residence is understandable in terms of labour market policy. However, carrying out the priority review is often a very long-winded process, thus the obligation under EU law to provide asylum seekers with "effective access to the labour market" remains unfulfilled in too many cases. This situation is further aggravated by the practice of some states to permit asylum applicants to work only in certain occupations, for example, as seasonal workers or in selected industries that suffer from a shortage of labour. Although asylum applicants may work in the asylum accommodation where they live, the number of such employment opportunities remains extremely limited, and the earning potential from such employment is very modest. To enhance integration prospects and reduce dependency on the welfare systems, the envisaged reform aims to facilitate access to the labour market. Most importantly, states would be permitted to forbid the applicant's labour activities for only six months after the date of application (European Commission 2016d, Art 15 (1)). If refugees are allowed to work, Member States are obliged to treat them in the same way as their nationals with regard to working conditions.7

Achieving common reception standards in all Member States is both important and extremely difficult. The EU Commission only has limited legislative competence in this regard – a fact that was acknowledged by keeping the status of the Reception Directive unchanged. Even though EU law touches on and sometimes intersects with national social law, the competence for social welfare, particularly the implementation of political aims through the grant of social benefits, rests with the nation states (Becker 2012, 7). For exactly this reason, the so-called European Pillar of Social Rights

is supposed to become only a reference framework "to screen the employment and social performance of participating Member States, to drive reforms at national level and, more specifically, to serve as a compass for renewed convergence within the euro area" (European Commission 2016e, 2). The pillar can thus serve primarily as a common normative basis for States' welfare policies. Besides the States' interest to retain their legislative authority in this area, the sheer variety of welfare systems in Europe, their interrelatedness with economic and budgetary conditions and the complexity resulting therefrom render a uniform welfare system in the EU hardly feasible. These factors also obstruct the harmonisation of reception conditions for refugees (European Commission 2016d, 6). Respective standards should not be introduced through the backdoor; instead benefits for refugees must be embedded into Member States' social welfare systems - which are generally weak in some cases, such as in the European south.

Against this background, unsurprisingly, Member States were particularly hesitant to introduce a common EU benchmark that would determine the level of financial support to be provided to applicants for the following reasons: First, most Member States do not meet material reception requirements through the provision of financial support, but rather provide benefits in kind or as a combination of in-kind and financial support. Second, the financial support currently provided to applicants is, in most cases, "well below all the possible benchmarks or thresholds examined (at-risk-of-poverty threshold, severely materially deprived threshold, and minimum income threshold)". A harmonisation of support levels would entail raising the level of support in many Member States, and could, in some cases, result in more favourable treatment being given to applicants than to Member States' indigent nationals (European Commission 2016d, 8). It is therefore envisaged that Member States shall be required only to take into account, rather than forced to implement, operational standards and indicators on reception conditions developed by EASO (European Commission 2016d, Art. 27 (1)).

Without guaranteeing adequate social protection on a common basis, even a reformed CEAS will not function as intended. Member States may circumvent their obligation to grant asylum protection by refusing to grant minimum social rights to refugees. In this context, it is particularly problematic that there is, as of yet, no agreement on how a dignified standard of living can be defined (European Commission 2016d, 7). Any effort to

Working conditions cover, at minimum, pay, dismissal, health and safety requirements at the workplace, working time and leave, as well as a consideration of collective agreements in force. The proposal also grants applicants equal treatment as to freedom of association and affiliation, education and vocational training, the recognition of professional qualifications and social security (Article 15(3)).

standardise reception conditions must inevitably tack-le a decisive question: how can comparable reception standards be achieved in light of differing living standards and economic wealth among Member States, especially since welfare benefits are primarily the responsibility of nation states? Finding an answer is a difficult, but necessary task if a "fair sharing of responsibility" between Member States, as called for in Art. 80 TFEU (Treaty on the Functioning of the European Union), is to be achieved.

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GERMANY AND GLOBAL REFUGEES: A HISTORY OF THE PRESENT

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The complexity of issues surrounding the topic of "refuge" dominated political, social and journalistic discussions in 2015-16 in Germany and Europe. Whereas positive expectations for the future and confidence had long been predominant in the Federal Republic, as of autumn 2015, the focus shifted towards fending off refugees. Many of the institutions, instruments and concepts of German refugee policy have been strained beyond their limits by the challenges emerging since the beginning of 2015. The extent to which the measures taken in connection with refugee policy are compatible with democratic values and aims is still being intensively debated. Observation of the current situation calls for situating it in the context of the global question of refugees and the phenomenon of forced migration in the 20th century. At the same time, we need to focus on the change in the policy and practice of admission of those people who have sought refuge in Germany after fleeing from violence.

What is forced migration?

Forms of forced migration can be detected when governmental, semi-governmental and para-governmental actors, as well as non-governmental actors to some extent, so extensively limit individuals' or collectives' life/survival chances and physical integrity, rights and freedoms, possibilities of political participation, sovereignty and security that they are forced to leave their places of origin. Forced migration can thus be understood as a compulsion to geographic movement that appears to leave no realistic alternative courses of action (Oltmer 2016a).

The concept of seeking refuge employed here refers to fleeing from violence that is largely exercised or threatened for political, ethnic-national, racist, gender-specific or religious motives. In the case of expulsions, resettlements or deportations, institutional actors organise and legitimate geographic movements by threatening or exercising violence. The goal is generally to obtain forced labour or to remove (parts of) populations from territories – often territories that have been conquered or acquired through violence – in order to enforce conceptions of homogeneity or to secure and/or stabilise control.

Migration conditioned by the use or threat of open violence is not specific to modernity – no more than are war, the disintegration of states and civil conflict as the essential background to forced migration. People fleeing, expulsions and deportations are to be found across the ages. In the history of modern forced migration, the two World Wars of the 20th century and the Cold War, in particular, served as elementary triggers. Just as in Europe during the Second World War, the number of refugees, expellees and deportees is estimated to have been 60 million, representing over ten percent of the continent's population (Kulischer 1948, 264). Moreover, the post-war periods following both World Wars were characterised by resulting population movements in the millions. These included the re-migration of refugees, evacuees, expellees, deportees, and prisoners-of-war on the one hand, as well as evictions, expulsions and fleeing of minorities caused by the efforts of victorious powers to homogenise the population of their (in part, newly acquired) territory on the other. Above that, from the late 1940s until the early 1970s, the lengthy and wide-ranging process of decolonisation also resulted in extensive movements of refugees and expulsions (see Gatrell 2013 for an overview).

Even after the end of the process of decolonisation and the end of the Cold War, in the late 20th and early 21st centuries, the global question of refugees persisted in many parts of the world in the context of war, civil conflict and the disintegration of states: in Europe (Yugoslavia), in the Middle East (Lebanon, Iran, Iraq, Syria, Yemen), in East Africa (Ethiopia, Somalia, Sudan/South Sudan), in West Africa (Congo, the Ivory

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Coast, Mali, Nigeria), in South Asia (Afghanistan, Sri Lanka), as well as in Latin America (Colombia).

Negotiating the protection of refugees

According to the 1951 Geneva Convention on Refugees, "refugees" are those migrants that flee across state borders in order to escape violence because their life, bodily integrity, rights and freedoms are either directly threatened or can, with certainty, be expected to be threatened. The Geneva Convention on Refugees, which has, in the meanwhile, been signed by 147 states, was developed in order to provide a legal framework for the treatment of the question of European refugees resulting from the Second World War. As a result, it was at first neither oriented towards global flows of refugees nor future-oriented. An extension of the convention beyond the issue of European refugees and beyond post-1949 refugee flows first took place in 1967, in the context of wide-ranging struggles to end European colonial rule. This is to say that in the 20th century, Europe long constituted the main problem for the global question of refugees: Europe as a theatre of war and Europe as the bearer of global colonialism.

Despite the dispositions of the Geneva Convention on Refugees and the establishment of regional protection regimes like those that have, for instance, also been developed in the European Union, states continue to have considerable discretion in deciding about the admission of migrants and the status of those they recognise as refugees. The willingness to provide protection is always the result of a multi-layered process of negotiations among individuals, collectives and (state) institutions whose relations, interests, categorisations, and practices are constantly changing. The ongoing transformation of the political, journalistic, scientific and public perception of migration is connected to a change in perspective concerning the question of who is to be understood as a refugee and under what circumstances; and to whom asylum is to be granted, and to what extent and for how long (Oltmer 2016b, 1-42).

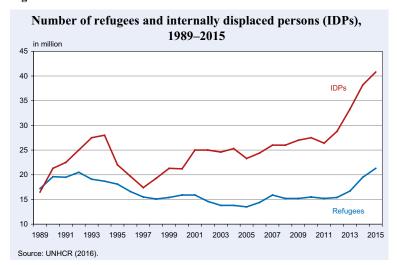
An individual right to asylum was first established by the 1948 Universal Declaration of Human Rights of the United Nations. Article 14, paragraph 1 states: "Everyone has the right to seek and to enjoy in other countries asylum from persecution." This formula has rarely been transposed into national law. The Federal Republic of Germany, however, is an exception to the general rule. By way of the formulation "Victims of

political persecution have a right to asylum", Article 16, paragraph 2, sentence 2 of the German Basic Law of 1948–49 provided a, by international standards, wide-ranging basic right to long-standing protection: according to this disposition, every victim of political persecution who comes to West Germany has an unrestricted and actionable claim to protection that is grounded in constitutional law (Münch 1993).

For a long time, the significance of the Federal Republic of Germany as a country of asylum was limited. In the 20 years from the 1949 founding of the Federal Republic until 1968, barely 70,000 people applied for asylum. During the first 30 years of the Federal Republic's existence, the number of asylum-seekers oscillated between a minimum of 2000 in 1953 and a maximum of 51,000 in 1979. Until the 1960s, the overwhelming majority of asylum-seekers entering Germany came from Eastern, Central Eastern, and South Eastern Europe. The annual portion of asylum-seekers from the "Eastern Bloc" varied between 72 percent and 94 percent. This period was marked not only by the intensively-debated admission of around 16,000 Hungarians in 1956–57, but also by the granting of asylum to around 4,000 Czechoslovaks in the aftermath of the 1968 "Prague Spring", which can also be understood as an expression of the anti-Communist motives of the Federal Republic's refugee policy.

The admission of approximately 36,000 Vietnamese "boat people" at the end of the 1970s and the beginning of the 1980s was a sign of the growing significance of refugees immigrating from outside of Europe. Substantial new waves of immigration occurred at the beginning of the 1980s, against the background of the military coup d'état in Turkey, the regime change in Iran brought about by the establishment of the "Islamic Republic", and domestic conflicts in Poland in light of the rise of the "Solidarność" trade union movement. As a result, in 1980 the number of asylum claimants surpassed the 100,000 mark for the first time in the history of the Federal Republic. Although the extent of asylum immigration subsequently declined again, it began again to grow in the mid-1980s. The background at that time was in particular the political and economic crisis in Eastern, Central Eastern and South Eastern Europe. The number of applicants for asylum in the Federal Republic again grew to over 100,000 in 1988; it reached around 190,000 in 1990 and then, finally, the record of 440,000 in 1992. At the same time, the composition of the groups of asylum-seekers changed fundamentally again: in 1986, 75 percent still came from the global South. In 1993, by contrast,

Figure 1



72 percent came from Europe (Bade and Oltmer 2004, 86–8, 106–17).

The first reaction consisted of extensive and heated political and journalistic debates on the possible limits to society's readiness to admit refugees ("the flood of refugees", "the boat is full") and alleged abuse of the dispositions regarding the right to asylum. This was quickly followed by restrictions on border crossings and access to the asylum procedure, which, in turn, reflected a long-term trend: for ever since the late 1970s, the more use that was made of the Federal Republic's right to asylum, the more stringently it was limited via legal measures and decrees.

Following German reunification in 1990 and the end of the Cold War, the admission of refugees was no longer seen as proof of success in global competition among political systems, but appeared instead as an additional burden on the welfare state. This was all the more the case inasmuch as it was not only the number of asylum-seekers that began to grow in the Federal Republic as of the end of the 1980s and the beginning of the 1990s: starting back in 1987, the number of ethnic German "returnees" from Eastern Europe ("Aussiedler") also massively increased. In 1988, this figure just surpassed the 200,000 mark and in 1990, it finally reached 400,000. In the meanwhile, moreover, hundreds of thousands of refugees fleeing the civil wars in former Yugoslavia had been admitted to Germany. Although the latter were granted protection, they were not, however, given access to the asylum procedure.

Beginning in the autumn of 1991, the often highly polemical political and journalistic debates that took place in the early 1990s on reforming the right to asylum were accompanied by increasing violence against foreigners, which was committed, above all, by young offenders, and by acceptance of this violence by some parts of German society: at first in the new federal states, but then also in the Western part of the Republic. In December 1992, the ruling coalition of the CDU/CSU and the FDP concluded an "asylum compromise" with the Social Democratic opposition. The revi-

sion of the basic right to asylum on the basis of this compromise came into force on 1 July 1993. According to the dispositions of Article 16a of the Basic Law that has been in force since then, as a rule whoever comes from a country that is "free of persecution" or who travelled to Germany by way of "safe third states" – by which the country is completely surrounded – no longer has any chance of being granted asylum. The reform of the right to asylum and more stringent border controls reduced the number of asylum-seekers to approximately 320,000 in 1993. In 1998, this figure dropped back below the 100,000 threshold and fell even further in the years that followed.

Patterns of global refugee flows

Seeking refuge is seldom a linear process. Instead, the movement of refugees typically occurs in phases. Frequently, what is first to be observed is precipitous flight to an apparently secure place of refuge in the immediate area. This is then followed by further migration to relatives or friends in a neighbouring region or country or the search for an informal or official refugee camp. Patterns of (repeated) return and renewed flight are likewise frequently to be found. The reasons for this cannot only be seen in the constantly changing and shifting lines of conflict, but must also include the difficulty of finding safety, as well as job opportunities and ways to make a living, at the place of refuge.

In light of the often extremely limited agency of those affected, flight is frequently characterised by paralysis: when faced with borders or insuperable natural obstacles, as a result of limited (financial) resources, because of policy measures concerning migration or due to a lack of networks. This is also the reason for the phenomenon of the eternalisation of refugee camps, resulting in a "camp urbanisation" and the development of "camp cities", which assume a metropolitan character in some cases. The majority of refugees worldwide are immobilised: They enjoy (often precarious) protection in so-called "protracted refugee situations", but, since they are not able to move, they have, in part, lost the power to take action and are socially extremely vulnerable.

Although the number of refugees established for the last several decades by the United Nations High Commissioner for Refugees (UNHCR) varies, it does so only to a relatively limited extent. Two peak phases in global movements of refugees can be distinguished for the period since the end of the Cold War: the early 1990s and the mid-2010s. From 1990 until 1994, the number of refugees ranged between a high of 20.5 million in 1992 and 18.7 million in 1994. Similarly high numbers were again reached in the mid-2010s: 19.5 million in 2014 and 21.3 million in 2015. In between these two peak phases, refugee numbers were lower, and during the years 1997-2012, they reached a high of 15.9 million in 2007 and a low of 13.5 million in 2004. The number of "internally displaced persons" (IDPs) showed far greater variation than the number of refugees. Because this category does not involve any crossing of international borders, it falls neither under the dispositions of the Geneva Convention on Refugees nor under the mandate of the UNHCR. As a result, UN data on the number of IDPs is far less reliable than that on the number of protection-seekers who have crossed borders. In the case of IDPs, a peak phase can also be detected at the beginning of the 1990s. In 1994, the UNHCR counted some 28 million refugees. But whereas the number of refugees reached a low after 2000, that of IDPs has risen more or less continuously since then: from 21.2 million in 2000 to 40.8 million in 2015 (see Figure 1).

It is relatively rare for refugees to flee across long distances, since the financial resources are lacking and transit countries or destination countries obstruct migration. Since, moreover, refugees strive to return to their home countries, they, in any case, seek for the most part to find safety close to their regions of origin, which in the overwhelming majority are located in the global South. For this reason, 95 percent of all Afghan refugees (2015: 2.6 million) live in the two neighbouring countries Pakistan and Iran. A similar situation applies in the case of Syria, which has been involved in a civil war since

2011. The majority of Syrian refugees, around 4.8 million in total, have fled to neighbouring countries: Turkey (2016: 2.7 million), Jordan (640,000), Iraq (246,000) and Lebanon (1.1 million). At 7.6 million, the number of people who have fled from violence to other parts of Syria and have become IDPs is even considerably higher. In light of these facts, it is hardly surprising that in 2015, countries from the global South were host to no less than 86 percent of all the refugees registered worldwide and 99 percent of all internally displaced persons. The trend is indeed rising in comparison to the portion of refugees hosted in the global North: in 2003, the share of refugees hosted by the poorer countries was only 70 percent. Hence, it is, above all, the global South that has been affected by the rise in the worldwide number of refugees and IDPs since the beginning of the 2010s.

Why did the Federal Republic of Germany become a destination for worldwide refugee flows in 2015?

Although the global South is, above all (and increasingly), the destination of international flows of refugees, it can, at the same time, be observed that Germany, in particular, has clearly and increasingly become a destination for global refugee flows since 2012, and especially in 2015. Why is this the case? Six elements of a complex constellation of factors are to be outlined here. The sequence of the arguments does not reflect a hierarchy: all of the factors cited below are directly interrelated and reciprocally reinforce one another.

1. Financial resources: countless studies show that poverty massively restricts capacity for movement; the majority of humanity cannot afford to migrate across long distances (see de Haas 2008 on the case of Africa). In 2015, however, the most important countries of origin of asylum-seekers in the EU were geographically relatively nearby (Syria, Iraq, South Eastern Europe). As a result, the costs involved in undertaking flight remained limited, at least in comparison to flows from other global hotspots of conflict - like, for instance, in West or East Africa, South Asia or Latin America - which rarely reach Europe. The fact that Turkey, as the most important first destination of Syrian refugees, directly borders on EU countries also played a role, as did the fact that it could offer only minimal future prospects, given the large number of refugees in the country, their precarious residency status, and limited access to education and the regular labour market.

- 2. Networks: migration principally occurs via networks that are constituted by relatives and acquaintances. This was another reason why Germany became the most important European destination for asylum-seekers in 2015, since in Germany there were already long-established and very extensive communities of common origin, which provided a port of call for people fleeing war, civil conflict and the measures of authoritarian regimes. This was not only the case for Syrians, but also for Iraqis, Afghanis, Eritreans, and persons from South Eastern Europe. Moreover, since migrant networks increase the likelihood of still more migration, the immigration of asylum-seekers to the Federal Republic gained impetus as seen by the dynamic observed in 2015.
- 3. Admission prospects: in the early 2010s and well into 2015, a relatively high level of willingness to admit refugees was seen in the Federal Republic. This can be explained by positive social, political and economic expectations for the future, in light of the favourable situation of the economy and on the labour market. Broad and highly-publicised debates over the scarcity of skilled workers and demographic changes, which had been ongoing for many years, also created an openness, as did the acceptance of human rights standards and the recognition of the need for protection of, above all, Syrian refugees. This also led to a greater willingness to engage in voluntary work on their behalf.
- 4. The lifting of barriers to migration: starting in the 1990s, the EU developed a system for repelling flows of refugees. For a long time, multifaceted European cooperation in the area of migration with countries like Libya, Egypt, Tunisia, Morocco, Albania, and Ukraine largely prevented refugees from reaching the borders of the EU and requesting asylum (instructive contributions are to be found in Geiger and Pécoud 2012; Walton-Roberts and Hennebry 2014 and Gammeltoft-Hansen 2011). Due to the destabilisation of various states on the margins of the EU (for instance, in the context of the "Arab Spring", but also in that of the Ukraine conflict), this EU defence perimeter has collapsed. The disintegration of political systems was closely related to the profound consequences of the 2007-2008 global financial and economic crisis, which exacerbated conflicts in numerous countries bordering the EU, reduced states' capacity for action, and minimised both the willingness to cooperate with the EU and the scope of such cooperation.
- 5. The dissolution of the "Dublin System": the global financial and economic crisis did not only affect the outer ring of perimeter defence against the migration of refu-

- gees, beyond the EU's borders, but also the inner ring. The "Dublin System", which was developed as of the early 1990s, led to the closing off of the core EU states and of Germany, in particular, from worldwide refugee flows, since it left the responsibility for carrying out an asylum procedure to the countries in which the refugees first entered the EU (Lavenex 2001). These could only be countries along the EU's external borders. For a long time, the system worked: among other reasons because, as of the mid-1990s, the number of refugees reaching the borders of the EU was relatively small. Due to the financial and economic crisis, however, and in light of the increasing number of asylum-seekers in recent years, various European border countries – above all, Greece and Italy - were less-and-less willing and able to bear the unequally-distributed burdens of the Dublin System, to register refugees and to integrate them into their respective national asylum procedures.
- 6. The Federal Republic as an "Ersatz-Refuge": within the EU, the worldwide financial and economic crisis also contributed to a sharp decline in the acceptance levels of important traditional countries of asylum like, for example, France and Great Britain to grant protection to refugees. In some ways, the Federal Republic became an ersatz-refuge in 2015 and is thereby a new destination for the global flow of refugees.

It is only the substantially higher number of asylum-seekers that first made the global question of refugees a subject of intensive discussion in Germany and Europe in 2015. This had rarely been the case previously: among other reasons, because for many years the EU's system of defence against refugee flows seemed to work. As far as their refugee policy is concerned, since the early 1990s the EU states have been able to reach an agreement, above all on the tools for preventing the arrival of refugees. Despite this fact, the communitarisation of a policy on protecting refugees has been part of the EU agenda for years now. Some essential agreements were reached, above all, in 2004-05: precisely at a time when refugee numbers were low. These agreements included minimum standards for the admission of asylum-seekers and the provision for their needs and dispositions via subsidiary protection. The framework can only be described as fragmentary, however. It was, in a way, a project that remained stuck in its initial phases (Bendel 2015).

The question of refugees has been understood as a global challenge ever since the First World War. A High Commissioner for Refugees – at the time, of the League

of Nations - has been in office since 1921 (Türk 1992, 3-13). But even almost 100 years later, the international refugee regime still lacks regular institutions with adequate budgetary resources and personnel, and which do not only act in emergency situations (Betts, Loescher and Milner 2012; Hammerstad 2014). It needs to be debated whether, in particular, the provision of greater resources for the UN High Commissioner for Refugees could not make an essential contribution to improving the chances of implementing the dispositions of the Geneva Convention on Refugees, recognising from the start constellations favouring refugee movements in the context of wars, civil conflicts and the policies of authoritarian systems, and taking measures in a timely manner – this is to say, preventively and proactively – to provide protection for refugees. This may perhaps help to prevent humanitarian catastrophes, or at least to considerably limit their extent.

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INTEGRATING REFUGEES INTO THE LABOR MARKET — A COMPARISON OF EUROPE AND THE UNITED STATES¹

PANU POUTVAARA² AND DANIELA WECH³



Employment plays a key role in the integration of refugees into their new home country. The United States has proven far more successful at integrating refugees into the labor market than the European Union.

Figure 1 illustrates a comparison between the employment rates of refugees and the total population in the EU and the US.⁴ It shows that the employment rate of refugees in the US is higher than in the EU from the very outset (40% compared to 20%) and that it also converges to that of the total population more quickly (in the US, the difference is less than ten percentage points three years after arrival, whereas in the EU, it is only after eight years that the difference becomes smaller than ten percentage points).

Compared to other immigrants in the European Union, the employment rate of refugees is significantly lower during the first five years after arrival (see Figure 2). The different immigrant categories considered are "international protection" (those immigrants who applied for asylum), "family" (those who came to reunite with family) and "work or study".⁵ In the first three years after arrival, the employment rate of immigrants that came to seek international protection was around 20%. After a stay of six years, it increased

to over 50%. The labor market integration of refugees is influenced by a number of regulations, which will be dealt with in this article. The employment rate of family immigrants increased from around 40% in the first year after arrival to over 50% in year four. The employment rate of the native-born population in 2008 was almost 66%. Immigrants who came as asylum seekers did not reach this level of employment until a stay of 11 to 14 years (then their employment rate even exceeded that of the native-born population), while for family migrants it took 15 to 19 years to reach an employment rate of 66%. The employment rate of immigrants who came to the EU to work or study was slightly higher than the rate of natives in the first year after arrival; and it was significantly above that of the native-born population at around 80% in the following years.6

In this article, we shed light on various factors that may explain differences in labor market integration of refugees between European countries and the United States. Firstly, we document how the size and composition of refugee flows differs between various European countries and the United States. There is a dramatic difference in that most refugees come to Europe as asylum applicants, while in the United States, most humanitarian migrants are outside the US when selected as refugees (people who are physically present in the US at the time of application are referred to as asylees). To be considered as a refugee in the US, it is necessary to receive a referral from the United States Refugee Admissions Program. Then the person is interviewed abroad by an officer from the US Citizenship and Immigration Service who determines whether they are eligible for refugee resettlement (US Citizenship and Immigration Services 2016b). There are also major differences in the distribution of countries of origin. In this article, we also present a more detailed picture of the labor market participation of refugees in selected EU countries and the United States. Finally, we take a look at institutional differences in terms of labor market access for asylum applicants.

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⁴ For the US, data for refugees is only available for the first five years since arrival.

⁵ It should be noted that the numbers for immigrants are not fully comparable to the number for the native population, since the age group considered is different: in EU-LSF (2008), all persons aged 15–74 years are considered, versus 15–64 years for the native population.

A study for Germany suggests that the wage gap between immigrants and natives is higher for low-skilled immigrants with poor German language skills (Beyer 2016). As these characteristics often apply to refugees, they are probably not only doing worse than other groups of immigrants in terms of employment rates, but also in terms of wage earnings.

Figure 1

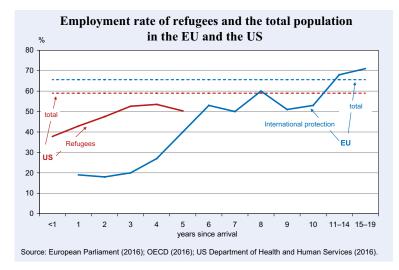


Figure 2

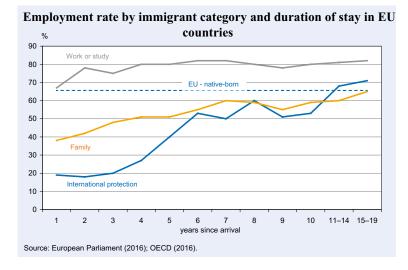
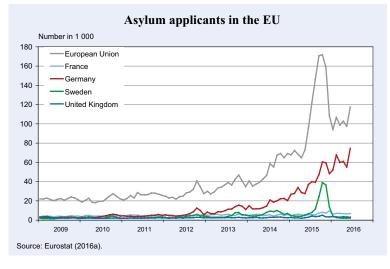


Figure 3



Asylum applications

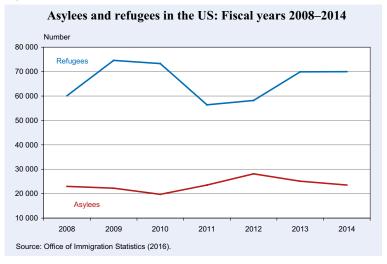
Since August 2015, the refugee crisis in the EU has received a great deal of public attention. The number of refugees that applied for asylum in the EU has soared, particularly due to the civil war in Syria. Figure 3 illustrates the development in the number of asylum applicants in the EU in recent years. The monthly number of asylum applications in the EU more than doubled between May and October 2015. It then decreased to around 100,000 applications per month at the beginning of 2016 due to the Turkey deal. Most asylum applications were submitted in Germany and Sweden. In the 4th quarter of 2015, almost 170,000 people applied for asylum in Germany (which corresponds to a share of almost 40% in the EU) and almost 90,000 people applied in Sweden (corresponding to a share of 20% of all applications in the EU). It is also interesting to note that the number of applications already started to increase substantially at the end of 2012 in the EU and Germany, long before the topic became the focus of policymakers and the media.

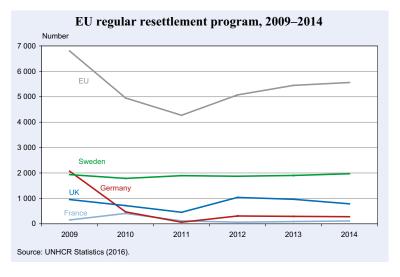
When comparing asylum applications between the EU and the United States, it is important to note that the terms "asylum applicants" and "refugees" are used differently in the EU and the US. In the EU, an asylum applicant is defined as a person having submitted an application for international protection (Eurostat 2016b). However, in the US, two different terms are used for individuals applying for protection: refugees and asylees. The former refers to individuals who are outside of the US at the time of submitting their application, whereas the latter refers to individuals who are physically present in the US or at a US port of entry when applying for asylum (MPI 2015). At the beginning of each fiscal year, the US government establishes a refugee admission ceiling, which determines the maximum number of refugees that are granted protection during the following 12 months (the fiscal year starts on the 1st October). The ceiling was established at 80,000 during the period from 2008 to 2011, and reduced to 76,000 in 2012. Although the ceiling was further reduced to 70,000 from 2013 to 2015, it was increased to 85,000 in 2016. The Obama administration decided to increase the refugee admission ceiling to 110,000 in 2017 (The White House 2016). The ceiling is broken down into regional caps; the largest contingent is currently allocated to refugees from the Middle East and South Asia. The ceiling for 2016 also includes 10,000 refugees from Syria. As far as asylum applications are concerned, there is no ceiling. There are two ways of applying for asylum in the US: the affirmative process and the defensive pro-

cess (American Immigration Council 2016). Individuals who are not in removal proceedings can affirmatively apply for asylum. If they are not granted asylum, they are referred to removal proceedings, where they can defensively apply for asylum with an immigration judge. Individuals who are granted asylum are officially referred to as asylees in the US. The legal status of refugees and asylees is the same. Individuals arriving under a regular resettlement program in the EU correspond to refugees in the US.

Figure 4 shows that far more immigrants came to the US as refugees than to the EU through a resettlement program. From 2008 to 2012, the number of refugees was clearly below the admission ceiling of 80,000 (Figure 4a) each year. However, in 2013 and 2014, it was practically as high as the refugee admission ceiling of 70,000 (69,909 and 69,975 respectively). The number of indi-

Figures 4a, 4b





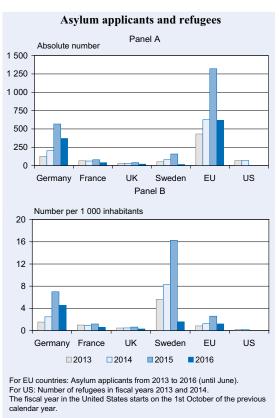
viduals who were granted asylum during the years from 2008 to 2014 was significantly lower than the number of admitted refugees. More individuals were granted asylum affirmatively than defensively (Office of Immigration Statistics 2016). In the EU, the magnitude of immigrants arriving under a resettlement program was considerably lower (around 4,000 to 7,000 per year) (Figure 4b). There were significant differences across countries: Sweden accommodated around 2,000 people per year, whereas only around 300 people arrived in Germany in recent years. When comparing the number of asylum applicants across countries, it is useful to take the population size of a country into account. Figure 5 depicts the total number of asylum applicants, as well as the number of asylum applicants per 1,000 inhabitants for the countries considered in Figures 3 and 4. The period of reference is not comparable between the EU countries and the US - the fiscal year 2014 is the

most recent year for which data is available for the US, monthly data for all EU countries is available until June 2016

A comparison between Figures 5a and 5b shows that, relative to its population size, Sweden received by far the most applications in 2013, 2014 and 2015 (around six, eight and 16 applicants per 1,000 inhabitants respectively). Germany received around two applicants per 1,000 inhabitants per year in 2013 and 2014 and seven applicants in 2015. On EU average, the number of applications per 1,000 inhabitants was significantly lower: around one per year in 2013 and 2014, and less than three in 2015. The numbers were below EU average in the UK in all years considered. As far as the United States is concerned, the number of refugees per 1,000 inhabitants was extremely small (around 0.2 in fiscal years 2013 and 2014).⁷

Figure 6 illustrates the main countries of origin of asylum applicants in the EU, as well as those of refugees

Figure 5



Source: Eurostat (2016); Office of Immigration Statistics (2016)

and individuals granted asylum in the US.⁸ In 2014, Syrian asylum applicants accounted for 20% in the EU; 7% of applicants came from Afghanistan and 6% from Kosovo. The two main countries of origin remained the same in 2015: 29% of asylum applicants came from Syria, followed by applicants from Afghanistan and Iraq (14% and 10% respectively).⁹ The top three countries of nationality of refugees in the US were Iraq (28%), Burma (21%) and Somalia (13%). One third of asylum grants were given to applicants from China, followed by Egyptians (12%) and Syrians (4%). Hence, it becomes obvious that the main countries of origin of asylum seekers differ significantly between the EU and the US.

Labor market integration

An important challenge is the integration of refugees into the labor market. A successful integration into the labor market also helps with general integration into society, and also has positive effects on host countries' economies.

Table 1 shows the employment rates of refugees for different EU countries. 10 The period of reference is different across countries. For comparative purposes, the employment rate of natives in the respective country is also shown.11 In Germany, the employment rate of refugees was 19% in the first year and 27% in the second year after arrival. After ten years, their employment rate reached 62%, but it remained below the employment rate of native-born individuals (75%). For Sweden, results are reported separately for men and women. The rate for male refugees increased from 14% in year one to 56% in year ten; while the rate for female refugees rose from 8% to 50%. The employment rate of natives was much higher (79% for men and 78% for women). As far as Denmark is concerned, the employment rate of refugees reached the same level as that of the native population ten years after recognition (75%). For the UK, data is only available for the first two years. Compared to Germany, Sweden and Denmark, the employment rate was significantly higher in the first two years after recognition. However, it was substantially lower than the rate for natives (43/49% compared to 73%). As shown by Table 1, the employment rate of refugees

 $^{^7}$ The number of asylum grants per 1,000 inhabitants is not shown in Figure 5b, it would be negligibly small.

⁸ For the US, the fiscal year 2014 is the most recent year for which data is available.

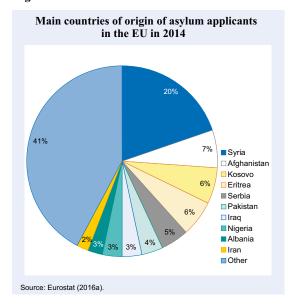
⁹ See Wech (2016) for an overview of the main countries of origin of asylum applicants in various EU Member States.

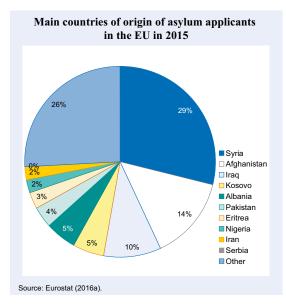
The age category considered varies between countries, for Germany, it is 15–64, for Sweden and Denmark, it is 14–64, and for the UK, results for refugees aged 18 and over are reported.

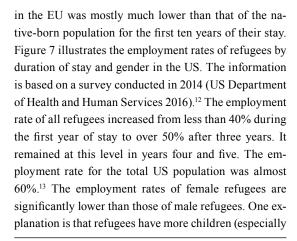
The population of reference is the population aged 15–64. Data is re-

The population of reference is the population aged 15–64. Data is reported for the year 2015 (most recently available).

Figures 6a and 6b

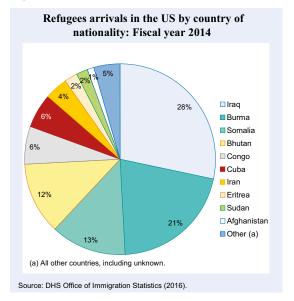


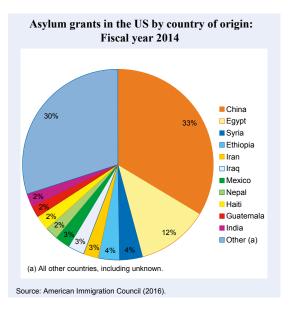




¹² Asylees were not asked to take part in the survey.

Figures 6c and 6d





those coming from poor countries), but cultural barriers also discourage female labor force participation. Many refugees have psychological traumas due to war, reducing labor force participation among both genders. While the female labor force participation rate increased from less than 30% in the first year to over 40% after four years, that of men rose from around 50% to over 65% after a stay of three years. It is interesting to note that the employment rate of male refugees was as high as that of native US men two years after arrival. It was even higher than that of native men in year three after arrival. The employment rate of female refugees, however, was considerably lower than that of native women in all years considered. Although conclusions regarding a comparison between the situation in the EU and the US should

¹³ The US comparison is drawn from December 2014.

Table 1

Employment r	rates of refugees,	vears after	arrival/reco	gnition in %
Employment	ates of refugees,	y cars arter	ai i i vai/ i cco	21111110111 III /U

Years after arrival / recognition	Germany	Sweden male	Sweden female	Denmark	UK			
1	19	14	8	15	43			
2	27	24	14	32	43 49 n.a. n.a. 73			
5	49	49	32	63	49 n.a. n.a. 73			
10	62	56	50	75	49 n.a. n.a. 73			
Natives 2015	75	79	78	75	73			
Note: For Germany and Sweden, y	ears since arrival a	re considered; and	for Denmark and th	ne UK, years since i	recognition.			

Source: European Parliament (2016); OECD (2016).

be drawn with caution due to the limited comparability of available data, the information in Figure 7 and Table 1 suggests that the employment rate of refugees in the US is generally higher than that of refugees in the EU, especially in the first years after arrival; and that it also converges more quickly to that of the native population in the US than in the EU. As far as return migration is concerned, survey evidence suggests that the intention to stay is lower among highly-educated migrants in Germany (Brücker et al. 2014) and in the Netherlands (Saint Pierre, Martinovic and Vroome 2015). In Sweden, refugees' probability of return migration is positively correlated with their income level (Klinthäll 2006). This is in line with what economic theory suggests, namely that return migration tends to strengthen the effects of the initial self-selection of migrants (Borjas and Bratsberg 1996).14

Figure 8 shows employment rates for different immigrant groups in Germany. They were all significantly below the average for the total population. The employment rate for nationals from war and crisis countries was only around 27%; that of the total population was almost 2.4 times as high (64%). The survey conducted in the US in 2014 (US Department of Health and Human Services 2016) also includes information on the employment rates of selected refugee groups by gender (see Figure 9). Both male and female employment rates were highest for refugees from Latin America (around 80% and 69% respectively); they were also considerably higher than those of the US population (around 65% and 54% respectively). The employment rates were lowest for refugees from the Middle East (around 52% for men and 23% for women).

Table 2 gives an overview of the education of different refugee groups in the US. Average years of education and the shares of refugees having obtained a certain education level vary significantly across regions of origin. However, no clear link between employment rates (see Figure 9) and education levels emerges. For example, refugees from Latin America were those with the highest employment rates, and refugees from the Middle East had the lowest employment rates. Table 2 shows that these differences cannot be related to significant differences in education levels (the average years of education were 11.2 years for Latin America and 10.9 years for the Middle East; the share of refugees with no education was 8.3% for both groups, and the percentage of refugees having attended secondary school was 35.0% for Latin America compared to 33.3% for the Middle East).

The IAB-BAMF-SOEP survey is the first study that includes representative information on the education level of those refugees that came to Germany in recent years (Brücker et al. 2016). 2349 refugees aged 18 years and above who came to Germany between the 1st of January 2013 and the 31st of January 2016 were interviewed during the time period from June to October 2016. Table 3 provides information on their school education. It shows that 37% attended a secondary school and 32% also obtained a respective degree. The duration of their school attendance was 12 years on average. By contrast, only 10% attended a primary school (average duration six years) and 9% did not attend any school at all. Hence, the qualification level of refugees is strongly polarized: on the one hand, there is a large percentage of refugees who have attended a secondary school, but on the other hand, there is also a large share of refugees who have only attended a primary school or no school at all. Overall, 55% of refugees aged 18 years or above have attended a school for at least ten years; this corresponds to European minimum standards (Brücker et al. 2016). As far as the qualification level is concerned, dif-

As far as initial selection is concerned outside the refugee context, Borjas (1987) shows that migrants from relatively egalitarian countries tend to come from the upper end of the skill distribution, and from relatively inegalitarian countries from the lower end; Borjas, Kauppinen and Poutvaara (2015) extend the analysis to self-selection in observable and unobservable abilities.

Figure 7

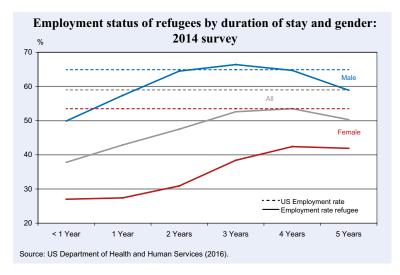


Figure 8

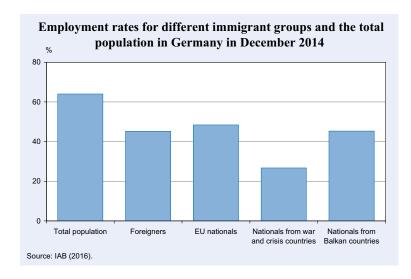
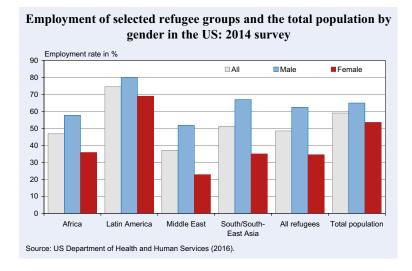


Figure 9



ferences are discernible regarding countries of origin. In general, the qualification level is lower among refugees from countries that have already been affected by war or civil war for a longer time than among those coming from countries in which access to educational institutions was guaranteed at least until the more recent past. The share of refugees from Syria with a secondary school degree is 40%, and therefore much higher than that of Afghan refugees (17%) (Brücker, Rother and Schupp (eds.) 2016).

Table 4 shows data on vocational and university education. 19% attended a university or a college, 13% also obtained a respective degree. Only 9% did vocational or company training and 6% obtained a degree, while a substantial share did not do any training at all (69%). On average, university/college graduates invested five years in their education and those who have completed a vocational/ company training invested three years in their training. However, two thirds of survey respondents stated that they would still like to acquire educational or vocational degrees in Germany. 23% aim to acquire a university degree.

The IAB-BAMF-SOEP-survey also provides insights into the language proficiencies of refugees. 90% of refugees did not have any German language knowledge when they came to Germany. Based on their own judgment, 30% were able to read and speak English well or very well at their point of arrival in Germany. German language knowledge improved with increasing duration of their stay in Germany: 18% of refugees who have been in Germany for less than two years

Table 2

Education	of selected	refugee groups	in	the US
Luucanon	or selected	TCIU2CC 2IVUDS	ш	me os

	Africa	Latin America	Middle East	South/ South-East Asia	All refugees
Average years of education before US entry	6.9	11.2	10.9	6.3	8.4
None	38.6	8.3	8.3	36.6	25.1
Primary school	27.3	23.2	24.2	25.1	24.7
Training in refugee camp	0.2	2.1	0.3	0.2	0.4
Technical school	3.4	9.7	9.3	0.5	4.5
Secondary school (or high school diploma)	23.1	35.0	33.3	30.6	31.2
University degree	3.9	13.9	19.6	2.8	9.3
Medical degree		2.5	1.1		0.6
Other		0.2	0.6	0.2	0.3

Source: US Department of Health and Human Services (2016).

Table 3

School attendance, school degrees and years of school attendance by type of school

	Share of those age	d 18 and over in %	Average years of school attendance				
Type of school	School attendance	School degree	All school attendants	With degree			
Still in school*	1		6				
Primary school	10		6				
Intermediate school	31	22	9	10			
Secondary school	37	32	12	12			
Other school	5	3	10	11			
No school	9						
No information	7		10				
Total	100	58	10	11			

^{* &}quot;Still in school" refers to people who attend a school in Germany, but who did not attend a school in their country of origin or did not provide any information on that.

"School attendance" was adjusted to "school attendance with degree", if the school corresponding to the obtained degree was at a higher level than the type of school the respondent stated to have visited.

Source: Brücker et al. (2016).

judged their knowledge of the language to be good or very good. The share of those with good or very good German language knowledge amounted to 32% among those who have already been in Germany for more than two years.

Access to welfare benefits and employment

When comparing the labor market situation of asylum applicants, it is interesting to analyze welfare systems and access to employment. Welfare systems set incentives for migrating to certain countries, and they also have an effect on job searching efforts. In the EU, asylum seekers are entitled to social assistance to meet

their basic needs. This assistance usually involves accommodation, food, vouchers, a financial allowance and basic access to healthcare services. However, there are differences across countries regarding the form of assistance for asylum seekers (European Parliament 2015). They receive benefits in cash, benefits in kind, or a combination of both. Recently, there has been a trend towards providing more benefits in kind than in cash in order to prevent setting incentives to apply for asylum in a certain country due to comparatively more generous welfare benefits. In Germany, for example, according to the Asylum Procedure Acceleration Act adopted on 20th October 2015, benefits for asylum seekers are supposed to be provided in kind as far as possible. In Bulgaria, asylum seekers no longer get any financial assistance

Table 4

Vocational	and	university	aducation.	Attendance	and degrees
vocational	ะสทต	university	ealication:	Arrengance	and degrees

	Share of those age	d 18 and over in %	Average years of education				
	Attendance	With degree*	All attendants	People with degree			
Company training/ vocational education (earlier) *	9	6	3	3			
Company training/ vocational education (currently) **	3		not available				
Universities/colleges	19	13	4	5			
No training	69						
No information	1						
Total	100	19	4	4			
* only attendance/degree abroad. ** a	attendance/degree in Ge	ermany.					

Source: Brücker et al. (2016).

as of 1st February 2015, if food is provided in reception centers three times a day. In contrast to the EU, asylum seekers are not eligible for social benefits in the US (Legal Information Institute 2016; Human Rights Watch 2013). According to federal law, only individuals who have been granted asylum or refugees who have been admitted to the US are eligible for federal public benefits. As far as state benefits are concerned, much scope is left to individual states regarding the kind of benefits to be provided to asylum seekers. In practice, some states only provide benefits to the elderly and children, for example, but no assistance to other asylum seekers. Refugees and asylum seekers who have been granted the status of asylees are entitled to receive cash and medical assistance, as well as social services including employment services and job and language training (Office of Refugee Resettlement 2016).

In both the EU and the US, asylum seekers have access to the labor market, but usually not immediately after submitting an application (DICE Database 2016; European Parliament 2015). Table 5 gives an overview of labor market access for asylum seekers in various EU countries and the US.¹⁵

In all countries listed, asylum seekers principally have access to the labor market; there are, however, restrictions in some countries. In the Netherlands, for example, asylum seekers are only allowed to work for 24 weeks per year, and in Sweden, they are required to have valid identification to gain a work permission. However, labor market access is subject to a waiting period in all countries except for Greece, Sweden and Norway. The length of the waiting period varies between one month in Portugal and 12 months in the United Kingdom. The

period has recently been shortened in a number of EU countries, for example in Germany, Italy and Bulgaria (European Parliament 2015). In the United States, the waiting period is 180 days. After 150 days, asylum seekers are allowed to apply for employment authorization (US Citizenship and Immigration Services 2016a). Individuals who are admitted to enter the US as refugees are allowed to work immediately upon arrival (US Citizenship and Immigration Services 2016b). In some EU countries, labor market access is subject to a labor market test. In Germany, the priority review, in which it is examined whether the job could be occupied by a German or other EU citizen, has recently been abolished in many regions (Bundesministerium für Arbeit und Soziales 2016). It is also not necessary for highly-skilled jobs and shortage occupations, and it is no longer required as soon as 15 months have passed since the asylum seeker obtained a residence permit. In most EU countries, labor market access is not restricted to specific sectors. In the US, there is neither a labor market test nor a restriction to sectors. Finally, it should be mentioned that although asylum seekers have access to the labor market after a certain waiting period, they face a number of obstacles in practice, for example, a lack of language skills and bureaucratic barriers (European Parliament 2015).

High unemployment rates among refugees are also a significant fiscal burden to natives. Battisti et al. (2014) study the effects of immigration on native welfare in a general equilibrium model with two skill types (high-and low-skilled), search frictions, wage bargaining, and a welfare state that redistributes through unemployment benefits, other transfers and publicly-provided goods and services. Their quantitative analysis suggests that immigration attenuates the effects of search frictions in all 20 OECD countries into which the model is cali-

¹⁵ See Born and Schwefer (2016) for an overview of further integration support institutions for asylum seekers in several OECD countries.

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	L.	Labor market access for asylum seekers in selected OECD countries, 2015	elected OECD countries, 2015	
			Labor market access is subject to	
	Labor market access	Waiting period from filing asylum claim	Labor market test	Restriction to sectors
Austria	Yes	Yes (3 months)	Yes	Yes (tourism and agriculture and apprenticeships in shortage occupations).
Belgium	Yes	Yes (4 months)	No	ON
Czech Republic	Yes	Yes (6 months)	No	oN
Denmark	Yes	Yes (6 months)	No	ON
Estonia	Yes	Yes (6 months)	No	No
Finland	Yes	Yes (3 months with a valid ID, 6 otherwise).	No	oN
France	Yes	Yes (9 months)	No	No (except public sector and some legal professions).
Germany	Yes (except for certain origin countries).	Yes (3 months)	Yes, in certain regions ¹⁾ (waived after 15 months and for highly skilled jobs and shortage occupations).	ON
Greece	Yes	No (conditional on delivery of temporary work permit).	Yes	No
Hungary	Yes	Yes (9 months)	Yes	No
Italy	Yes	Yes (2 months)	No	ON
Luxembourg	Yes	Yes (9 months)	Yes	ON
Netherlands	Yes (24 out of 52 weeks).	Yes (6 months)	ON	ON
Poland	Yes	Yes (6 months)	No	oN
Portugal	Yes	Yes (1 month)	No	oN
Slovenia	Yes	Yes (9 months)	No	No
Spain	Yes	Yes (6 months)	No	No
Sweden	Yes (only for asylum seekers with valid IDs).	No	No	oN
United Kingdom	Yes	Yes (12 months)	Yes	Yes (only permitted for occupations in the shortage occupations list).
Norway	Yes (but several formal requirements).	No (but asylum interview is a pre-requisite).	No	No
Switzerland	Yes (regional discretion).	Yes (3 months)	Yes	No
United States	Yes	Yes (5.9 months)	No	No
Source: DICE Dat	Source: DICE Database (2016), ¹⁾ Bundesministerium für Arbeit und Soz	d Soziales (2016).		

brated, and that the welfare gains of immigration tend to outweigh the welfare costs of redistribution. It should be noted that these results are for all immigrants together. Battisti et al. (2014) also calculate how different factors affect the welfare effects of immigration, and conclude that a higher unemployment rate among low-skilled immigrants in particular tends to decrease the potential gains. They also document substantial gaps in unemployment rates between immigrants and natives. The unemployment rate of low-skilled immigrants is higher than that of low-skilled natives in all other countries apart from the US, in which the unemployment rate is marginally higher among immigrants.

Concluding remarks

There are major differences between Europe and the United States in the size and composition of refugee flows, and in how well or badly refugees are integrated into the labor market. Firstly, the EU receives far more asylum applications than the US, while the US takes many more refugees through a planned resettlement program, in which the applicants are outside the US at the time of submitting their application, than the EU takes in through its regular resettlement programs. Overall, the number of refugees arriving in the EU is much larger. Secondly, there are major differences in the composition of refugee flows. In 2015, over half of asylum applicants in the EU came from Syria, Afghanistan or Iraq; in 2014, one third of applicants came from Syria, Afghanistan and Kosovo. For the US, the largest groups of refugees admitted through resettlement programs in the fiscal year 2014 were the Iraqis and the Burmese, accounting together for almost half of the total number, followed by the Somalis and the Bhutanese. A third of asylum permits were granted to the Chinese. Thirdly, there are major differences in the employment performance of refugees. Integration into the labor market is much faster in the US than in the EU.

Improving the labor market integration of refugees is a major challenge for EU countries. In addition to having negative consequences on the host country's economy (refugees who are not integrated into the labor market usually depend on welfare payments), failure in labor market integration risks causing social isolation and radicalization. Europe has suffered in recent years from several terrorist attacks, in which the perpetrators were born in Europe, but failed to integrate into the society and later radicalized. One reason for the more successful integration in the US is that the US has always

been an immigration country, and there are many more low-paying entry-level jobs available, including for those with rather limited skills. In the EU, immigration is a more recent phenomenon, and expectations concerning language skills are also simultaneously higher and more difficult to meet, with the exception of the UK and Ireland, and of France and Belgium for immigrants from French-speaking countries. Furthermore, more generous European welfare states that also influence the choice of the destination country to some degree are not pushing refugees to work to earn their own living to the same extent as the US. In addition to that, refugees who enter the labor market face higher taxes and other deductions in Europe, reducing incentives to take up employment. Therefore, it hardly pays off to take a low-skilled and/or part-time job, since asylum seekers would not have a higher level of available income compared to social welfare. It is of the utmost importance that European countries promote labor market integration of refugees. This calls for improving language skills and training, as well as promoting employment not only for those with more limited language skills, but also for those with lower wages and wage subsidies. Furthermore, in Germany, some institutional regulations could be changed to facilitate labor market access for refugees. As mentioned in the section above, the priority rule has recently been abolished in many regions, but not in all parts of Germany. This bureaucratic burden could also be abolished in the rest of Germany. Moreover, according to the residency requirement, refugees are obliged to stay in the municipality they have been allocated to for three years, which also complicates the search for employment. A prohibition of self-employment and restrictions on working for temporary employment agencies also represent obstacles to successful labor market integration. Hence, a comparison between the US and Europe shows that there is considerable scope for facilitating labor market access for refugees in European countries.

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ESTIMATING THE SIZE OF THE SHADOW ECONOMIES OF HIGHLY-DEVELOPED COUNTRIES: SELECTED NEW RESULTS

FRIEDRICH SCHNEIDER¹

Introduction

Empirical research into the size and development of the global shadow economy has grown rapidly (Feld and Schneider 2010; Gerxhani 2003; Schneider 2011, 2015; Schneider and Williams 2013). The goal of this paper is to present the latest shadow economy estimates for 36 highly-developed countries over 2003–2016 and to discuss their different developments. The article begins with some theoretical considerations, including a definition of the shadow economy and a brief discussion of its main causes. This is followed by a short description of the various measurement methods and estimates of the size of the shadow economies of 36 highly-developed countries over 2003–2016. Finally, the last section offers a summary and some concluding remarks.

Theoretical considerations

Defining the shadow economy

Researchers attempting to measure the size of the shadow economy face the question of how to define it (Schneider 2015; Schneider and Enste 2000, 2002; Schneider and Williams 2013; Alm, Martinez-Vazquez and Schneider 2004; Feld and Schneider 2010). One commonly used working definition is all currently unregistered economic activities that would contribute to the officially calculated (or observed) Gross National Product if observed. Smith (1994, 18) uses the definition

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"market-based production of goods and services, whether legal or illegal, that escapes detection in the official estimates of GDP." One of the broadest definitions includes: "those economic activities and the income derived from them that circumvent government regulation, taxation or observation" (Dell'Anno 2003; Dell'Anno and Schneider 2004).

This article uses the following, narrower, definition of the shadow economy.³ The shadow economy includes all market-based legal production of goods and services that are deliberately concealed from public authorities for the following reasons:

- (1) to avoid payment of taxes, e.g. income taxes or value added taxes,
- (2) to avoid payment of social security contributions,
- (3) to avoid certain legal labor market standards, such as minimum wages, maximum working hours, safety standards, etc., and
- (4) to avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms.

Theorizing about the shadow economy

Individuals are rational calculators who weigh up costs and benefits when considering breaking the law. Their decision to partially or completely participate in the shadow economy is a choice overshadowed by uncertainty, as it involves a trade-off between gains if their activities are not discovered and losses if they are discovered and penalized. Shadow economic activities SE thus negatively depend on the probability of detection p and potential fines f, and positively on the opportunity costs of remaining formal denoted as B. The opportunity costs are positively determined by the burden of taxation T and high labor costs W – individual income generated in the shadow economy is usually categorized as labor income rather than capital income - due to labor market regulations. Hence, the higher the tax burden and labor costs, the more incentives individuals have to avoid these costs by working in the shadow economy.

² This definition is used, for example, by Feige (1989, 1994) and Schneider (2011, 2015). Do-it-yourself activities are not included. For estimates of the shadow economy and do-it-yourself activities for Germany, see Buehn, Karmann and Schneider (2009).

³ Compare also the excellent discussion of the definition of a shadow economy in Pedersen (2003) and Kazemier (2006).

The probability of detection p itself depends on enforcement actions A taken by the tax authority and on facilitating activities F accomplished by individuals to reduce the detection of shadow economic activities. This discussion suggests the following structural equation:

$$SE = SE \left[\vec{p} \left(\vec{A}, \vec{F} \right); \vec{f}; \vec{B} \left(\vec{T}, \vec{W} \right) \right]$$

Hence, shadow economic activities may be defined as those economic activities and income earned that circumvent government regulation, taxation or observation. More narrowly, the shadow economy includes monetary and non-monetary transactions of a legal nature; hence all productive economic activities that would generally be taxable were they reported to the state (tax) authorities. Such activities are deliberately concealed from public authorities to avoid payment of income, value added or other taxes and social security contributions, or to avoid compliance with certain legal labor market standards such as minimum wages, maximum working hours, or safety standards and administrative procedures. The shadow economy thus focuses on productive economic activities that would normally be included in the national accounts, but which remain underground due to tax or regulatory burdens.⁴ Although such legal activities would contribute to a country's value added, they are not captured in national accounts because they are produced in illicit ways. Informal household economic activities such as do-it-yourself activities and neighborly help are typically excluded from the analysis of the shadow economy.5

What are the most important determinants influencing the shadow economy? Table 1 offers an overview of these factors.

Methods for estimating the size of the shadow economy

Estimating the size of a shadow economy is a difficult and challenging task. This article only outlines various procedures for estimating the size of a shadow economy.⁶ Three different categories of measurement methods are most widely used, and each is briefly discussed.

Direct approaches

These are microeconomic approaches that either employ well-designed surveys and samples based on voluntary replies, or tax auditing and other compliance methods. Sample surveys designed to estimate the shadow economy are widely used.⁷ The main disadvantages of this method are the flaws inherent in all surveys. For example, the average precision and results depend heavily on the respondent's willingness to cooperate, it is difficult to assess the amount of undeclared work from a direct questionnaire, most interviewees hesitate to confess to fraudulent behavior, and responses are of uncertain reliability.

Indirect approaches

These approaches, which are also called indicator approaches, are mostly macroeconomic and use various economic and other indicators that contain information about the development of the shadow economy over time. Relating them to the definition of the shadow economy, they provide value added figures. In most cases, legally-bought material is often included; hence, they provide upper-bound estimates with the danger of a double counting problem due to the inclusion of the legally-bought material. Therefore a wide (broad) definition of the shadow economy is applied; especially as some criminal activities like human trafficking are also included. There are currently five indicators that leave some traces of the shadow economy.⁸

⁴ Although classical crime activities such as drug dealing are independent of increasing taxes and the causal variables included in the empirical models are only imperfectly linked (or causal) to classical crime activities, the footprints used to indicate shadow economic activities such as currency in circulation also apply for classic crime. Hence macroeconomic shadow economy estimates do not typically distinguish legal from illegal underground activities; but instead represent the whole informal economy spectrum.

From a social perspective, maybe even from an economic one, soft forms of illicit employment such as moonlighting (e.g. construction work in private homes) and its contribution to aggregate value added may be assessed positively. For a discussion of these issues, see Thomas (1992) and Buehn, Karmann and Schneider (2009).

⁶ The extensive discussion over the pros and cons of the various methods used to measure/estimate the shadow economy is not documented here due to space reasons; compare, for example, Feld and Schneider (2010), Schneider (2015) and Schneider and Williams (2013).

The direct method of voluntary sample surveys was extensively used for the first time for Norway by Isachsen, Klovland and Strom (1982), and Isachsen and Strom (1985). For Denmark this method is used by Mogensen et al. (1995) in which they report "estimates" of the shadow economy of 2.7% of GDP for 1989, 4.2% of GDP for 1991, 3.0% of GDP for 1993 and 3.1% of GDP for 1994. See also newer studies like Feld and Larsen (2005, 2008, 2009) that estimate similar sizes for the shadow economy of Germany. The advantages and disadvantages of this method are extensively dealt with by Pedersen (2003), Mogensen (1985) and Mogensen et al. (1995) in their excellent and very carefully conducted investigations.

⁸ Due to space constraints, these approaches are merely given a mention and not explored in greater detail. Compare Schneider (2015).

Table 1

Causal variable	Theoretical reasoning	References
(1) Tax and social security contribution burdens	The distortion of the overall tax burden affects labor-leisure choices and may stimulate labor supply in the shadow economy. The bigger the difference between the total labor cost in the official economy and after-tax earnings (from work), the greater the incentive to reduce the tax wedge and work in the shadow economy. This tax wedge depends on social security burden/payments and the overall tax burden, making them a key determinant in the existence of the shadow economy.	E.g. Johnson, Kaufmann and Zoido-Lobatón (1998a,b); Giles (1999a); Tanzi (1999); Schneider (2003, 2005, 2015); Dell'Anno (2007); Dell'Anno, Gomez-Antonic and Alanon Pardo (2007); Schneider and Williams (2013).
(2) Quality of public institutions	The quality of public institutions is another key factor in the development of the informal sector. In particular, the efficient and discretionary application of the tax code and government regulations plays a crucial role in the decision to work underground. A bureaucracy with highly corrupt government officials tends to be associated with greater unofficial activity, while good rule of law through secure property rights and contract enforceability increases the benefits of having a formal status. The likelihood of an informal sector developing thanks to the failure of political institutions in promoting an efficient market economy, and entrepreneurs going underground due to inefficient public goods provision, may be reduced if institutions can be strengthened and fiscal policy is more closely aligned with the median voter's preferences.	E.g. Johnson et al. (1998a,b); Fried man, Johnson, Kaufmann and Zoi do-Lobatón (2000); Dreher and Schneider (2009); Dreher, Kotso giannis and McCorriston (2009) Schneider (2010, 2015); Teobaldell (2011); Teobaldelli and Schneide (2013); Schneider and Williams (2013).
(3) Regulations	Regulations such as labor market regulations or trade barriers for example, are another important factor that reduces freedom (of choice) for individuals in the official economy. They lead to a substantial increase in labor costs in the official economy and thus provide another incentive to work in the shadow economy: countries that are more heavily regulated tend to have a higher share of the shadow economy in total GDP.	E.g. Johnson, Kaufmann and Shlei fer (1997); Johnson, Kaufmann an Zoido-Lobatón (1998b); Friedman Johnson, Kaufmann and Zoido-Lo baton (2000); Kucera and Roncolate (2008); Schneider (2011, 2015).
(4) Public sector services	An increase in the shadow economy may lead to lower state revenues, which in turn reduce the quality and quantity of publicly-provided goods and services. Ultimately, this may raise tax rates for firms and individuals, although the quality of the public goods (such as public infrastructure) and of the administration may continue to deteriorate. The result is an even stronger incentive for participating in the shadow economy.	E.g. Johnson, Kaufmann and Zoi do-Lobatón (1998a,b); Feld and Schneider (2010).
(5) Tax morale	The efficiency of the public sector also has an indirect effect on the size of the shadow economy because it affects tax morale. Tax compliance is driven by a psychological tax contract that entails rights and obligations on the part of taxpayers and citizens on the one hand, but also on the part of the state and its tax authorities on the other hand. Taxpayers are more inclined to pay their taxes honestly if they receive valuable public services in exchange. The treatment of taxpayers by the tax authority also plays a role. If taxpayers are treated like partners in a (tax) contract instead of subordinates in a hierarchical relationship, taxpayers will fulfil the obligations of the psychological tax contract more readily. Hence, (better) tax morale and (stronger) social norms may reduce the probability of individuals working underground.	E.g. Feld and Frey (2007); Kirch ler (2007); Torgler and Schneide (2009); Feld and Larsen (2005 2009); Feld and Schneider (2010).
(6) Development of the official economy	The development of the official economy is another key factor in the shadow economy. The higher (lower) the unemployment quota (GDP-growth), the higher the incentive to work in the shadow economy, ceteris paribus.	Schneider and Williams (2013) Feld and Schneider (2010).
(7) Self-employment	The higher the rate of self-employment, the more activities can be performed in the shadow economy, ceteris paribus.	Schneider and Williams (2013) Feld and Schneider (2010).

46

(1) The discrepancy between national expenditure and income statistics

This approach is based on discrepancies between income and expenditure statistics. In national accounting the income measure of GNP should be equal to the expenditure measure of GNP. Thus, if an independent estimate of the expenditure side of the national accounts is available, the gap between the expenditure measure and the income measure can be used as an indicator of the extent of the shadow economy.⁹

(2) The discrepancy between the official and actual labor force

A decline in labor force participation in the official economy can be seen as an indication of increased activity in the shadow economy. If total labor force participation is assumed to be constant, then a decreasing official rate of participation can be seen as an indicator of increased shadow economic activities, ceteris paribus.¹⁰

(3) The transactions approach

This approach has been fully developed by Feige.¹¹ It is based upon the assumption that there is a constant relation over time between the volume of transactions and official GNP, as summarized by the well-known Fisher quantity equation, or M*V = p*T (with M money, V velocity, p prices, and T total transactions). Assumptions also have to be made about the velocity of money and about the relationships between the total value of transactions p*T and total (official + unofficial) nominal GNP. Relating total nominal GNP to total transactions, the GNP of the shadow economy can be calculated by subtracting official GNP from total nominal GNP.¹²

(4) The currency demand approach

The currency demand approach was first used by Cagan (1958), who considered the correlation between currency demand and tax pressure (as one cause of the shadow

economy) for the United States over the period 1919 to 1955. Cagan's approach was further developed by Tanzi (1980, 1983), who econometrically estimated a currency demand function for the United States for the period 1929 to 1980 in order to calculate the size of the shadow economy. His approach assumes that shadow (or hidden) transactions are undertaken in the form of cash payments so as to leave no observable traces for the authorities. An increase in the size of the shadow economy will therefore increase the demand for currency. To isolate the resulting excess demand for currency, an equation for currency demand is estimated over time. All possible conventional factors, such as the development of income, payment habits, interest rates, credit and other debt cards as a substitute for cash and so on, are controlled for. Additionally, variables such as direct and indirect tax burdens, government regulation, etc., which are assumed to be major factors causing people to work in the shadow economy, are included in the estimation equation.13

(5) The physical input (electricity consumption) method

(i) The Kaufmann - Kaliberda Method

To measure overall (official and unofficial) economic activity in an economy, Kaufmann and Kaliberda (1996) assume that electric power consumption is regarded as the single best physical indicator of overall (or official plus unofficial) economic activity. Overall economic activity and electricity consumption have been empirically observed throughout the world to move in lock-step with an electricity-to-GDP elasticity usually close to one. This means that the growth of total electricity consumption is an indicator for growth of overall (official and unofficial) GDP. By having this proxy measurement for the overall economy and then subtracting from this overall measure the estimates of official GDP, Kaufmann and Kaliberda (1996) derive an estimate of unofficial GDP.

(ii) The Lackó method

Lackó (1998, 1999, 2000a,b) assumes that a certain part of the shadow economy is associated with the household consumption of electricity. This part comprises so-called household production, do-it-yourself activities, and other non-registered production and services. Lackó further assumes that in countries where the por-

¹³ The estimation of such a currency demand equation has been criticized by Thomas (1999), but part of this criticism has been considered by the work of Giles (1999a,b) and Bhattacharyya (1999), who both use the latest econometric techniques.

⁹ See, for example, Franz (1983) for Austria; MacAfee (1980), O'Higgins (1989) and Smith (1985) for Great Britain; Petersen (1982) and Del Boca (1981) for Germany; Park (1979) for the United States. For a critical survey, see Thomas (1992).

¹⁰ Such studies have been made for Italy, see for example Contini (1981) and Del Boca (1981); for the United States, see O'Neill (1983), for later studies, see Williams (2009, 2013), Williams and Lansky (2013) and Williams and Rodgers (2013), for a critical survey, see Thomas (1992).

¹¹ For an extended description of this approach, see Feige (1996); for a further application for the Netherlands, Boeschoten and Fase (1984) and for Germany, Langfeldt (1984).

¹² For a detailed criticism of the transaction approach, see Boeschoten and Fase (1984), Frey and Pommerehne (1984), Kirchgässner (1984), Tanzi (1982a,b, 1986), Dallago (1990), Thomas (1986, 1992, 1999) and Giles (1999a).

Table 2

Table 2	G.	C 41	,		641 2	o ET	, .	2002	2016 (0/ 6	ec . 1 .	YDD)		
	Size o	f the sha	adow ec	onomy	of the 28	8 EU-co	untries,	2003 –	2016 (ir	1 % of o	fficial C	JDP)		
Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Austria	10.8	11.0	10.3	9.7	9.4	8.1	8.5	8.2	7.9	7.6	7.5	7.8	8.2	7.8
Belgium	21.4	20.7	20.1	19.2	18.3	17.5	17.8	17.4	17.1	16.8	16.4	16.1	16.2	16.1
Bulgaria	35.9	35.3	34.4	34.0	32.7	32.1	32.5	32.6	32.3	31.9	31.2	31.0	30.6	30.2
Croatia	32.3	32.3	31.5	31.2	30.4	29.6	30.1	29.8	29.5	29.0	28.4	28.0	27.7	27.1
Czech Republic	19.5	19.1	18.5	18.1	17.0	16.6	16.9	16.7	16.4	16.0	15.5	15.3	15.1	14.9
Denmark	17.4	17.1	16.5	15.4	14.8	13.9	14.3	14.0	13.8	13.4	13.0	12.8	12.0	11.6
Estonia	30.7	30.8	30.2	29.6	29.5	29.0	29.6	29.3	28.6	28.2	27.6	27.1	26.2	25.4
Finland	17.6	17.2	16.6	15.3	14.5	13.8	14.2	14.0	13.7	13.3	13.0	12.9	12.4	12.0
France	14.7	14.3	13.8	12.4	11.8	11.1	11.6	11.3	11.0	10.8	9.9	10.8	12.3	12.6
Germany 1)	16.7	15.7	15.0	14.5	13.9	13.5	14.3	13.5	12.7	12.5	12.1	11.6	11.2	10.8
Greece	28.2	28.1	27.6	26.2	25.1	24.3	25.0	25.4	24.3	24.0	23.6	23.3	22.4	22.0
Hungary	25.0	24.7	24.5	24.4	23.7	23.0	23.5	23.3	22.8	22.5	22.1	21.6	21.9	22.2
Ireland	15.4	15.2	14.8	13.4	12.7	12.2	13.1	13.0	12.8	12.7	12.2	11.8	11.3	10.8
Italy	26.1	25.2	24.4	23.2	22.3	21.4	22.0	21.8	21.2	21.6	21.1	20.8	20.6	20.2
Latvia	30.4	30.0	29.5	29.0	27.5	26.5	27.1	27.3	26.5	26.1	25.5	24.7	23.6	22.9
Lithuania	32.0	31.7	31.1	30.6	29.7	29.1	29.6	29.7	29.0	28.5	28.0	27.1	25.8	24.9
Luxembourg (Grand-Duché)	9.8	9.8	9.9	10.0	9.4	8.5	8.8	8.4	8.2	8.2	8.0	8.1	8.3	8.4
Malta	26.7	26.7	26.9	27.2	26.4	25.8	25.9	26.0	25.8	25.3	24.3	24.0	24.3	24.0
Netherlands	12.7	12.5	12.0	10.9	10.1	9.6	10.2	10.0	9.8	9.5	9.1	9.2	9.0	8.8
Poland	27.7	27.4	27.1	26.8	26.0	25.3	25.9	25.4	25.0	24.4	23.8	23.5	23.3	23.0
Portugal	22.2	21.7	21.2	20.1	19.2	18.7	19.5	19.2	19.4	19.4	19.0	18.7	17.6	17.2
Romania	33.6	32.5	32.2	31.4	30.2	29.4	29.4	29.8	29.6	29.1	28.4	28.1	28.0	27.6
Slovakia	18.4	18.2	17.6	17.3	16.8	16.0	16.8	16.4	16.0	15.5	15.0	14.6	14.1	13.7
Slovenia	26.7	26.5	26.0	25.8	24.7	24.0	24.6	24.3	24.1	23.6	23.1	23.5	23.3	23.1
South- Cyprus	28.7	28.3	28.1	27.9	26.5	26.0	26.5	26.2	26.0	25.6	25.2	25.7	24.8	24.2
Spain	22.2	21.9	21.3	20.2	19.3	18.4	19.5	19.4	19.2	19.2	18.6	18.5	18.2	17.9
Sweden	18.6	18.1	17.5	16.2	15.6	14.9	15.4	15.0	14.7	14.3	13.9	13.6	13.2	12.6
United Kingdom	12.2	12.3	12.0	11.1	10.6	10.1	10.9	10.7	10.5	10.1	9.7	9.6	9.4	9.0
28 EU-countries / Average (unweighted)	22.6	22.3	21.8	21.1	20.3	19.6	20.1	19.9	19.6	19.3	18.8	18.6	18.3	17.9

¹⁾ The shadow economy values for Germany have been adjusted due to a change in the official GDP statistics of the German national accounts.

Source: Author's calculations, December 2015; values for 2015 and 2016 are projections on the basis of preliminary values.

tion of the shadow economy associated with household electricity consumption is high, the rest of the hidden economy (or the part Lackó cannot measure) will also be high. Lackó (1996, 19 ff.) assumes that in each country a part of the household consumption of electricity is used in the shadow economy.

The model approach

All of the methods described to date consider just one indicator to capture all effects of the shadow economy. However, shadow economy effects show up simultaneously in production, labor and money markets. The model approach explicitly considers multiple causes of the existence and growth of the shadow economy, as well as the multiple effects of the shadow economy over time. The empirical method used is quite different from those deployed to date. It is based on the statistical theory of unobserved variables, which considers multiple causes and multiple indicators of the phenomenon to be measured.

As the size of the shadow economy is an unknown (hidden) figure, a latent estimator approach using the MIMIC (i.e. multiple indicators, multiple causes estimation) procedure is applied. This method is based on the statistical theory of unobserved variables. The statistical idea behind such a model is to compare a sample covariance matrix, that is, a covariance matrix of observable variables, with the parametric structure imposed on this matrix by a hypothesized model. Using covariance information among the observable variables. the first step consists of linking the unobservable variable to observable variables in a factor analytical model, also called a measurement model. Secondly, relationships between the unobservable variable and observable variables are specified through a structural model. Therefore, a MIMIC model is the simultaneous specification of a factor and a structural model. In this sense, the MIMIC model tests the consistency of a "structural" theory through data and is thus a confirmatory, rather than an exploratory technique. An economic theory is thus tested examining the consistency of actual data with the hypothesized relationships between the unobservable (latent) variable or factor and the observable (measurable) variables.

Size of the shadow economies of 31 European and five other OECD countries

In the Tables 2 to 4 the size and development of 31 European and of five non-European shadow economies over the period 2003-2016 are presented.14 If we first consider the results for the average size of the shadow economy of the 28 European Union countries in Table 2, we realize that the shadow economy in the year 2003 was 22.6% (of official GDP), which decreased to 19.6% in 2008 and increased to 20.1% in 2009 and then decreased again to 17.9% in 2016.15 With respect to a decrease or increase in 2016, the development of the shadow economy in the individual countries will not be uniform. In most EU-countries (25 out of 28) the shadow economy will further decrease, but in the remaining three countries it will increase. The 25 EU-countries where the shadow economy will further decrease are Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Ireland,

Table 3

Size of the shadow economy of three European countries (non-EU Members), 2003 – 2016 (in % of official GDP)										P)				
Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Norway	18.6	18.2	17.6	16.1	15.4	14.7	15.3	15.1	14.8	14.2	13.6	13.1	13.0	12.6
Switzerland	9.5	9.4	9.0	8.5	8.2	7.9	8.3	8.1	7.8	7.6	7.1	6.9	6.5	6.2
Turkey	32.2	31.5	30.7	30.4	29.1	28.4	28.9	28.3	27.7	27.2	26.5	27.2	27.8	29.2
Three non-EU countries / Average	20.1	19.7	19.1	18.3	17.6	17.0	17.5	17.2	16.8	16.3	15.7	15.7	15.8	16.0
Unweighted average of all 31 European countries	22.4	22.1	21.6	20.9	20.1	19.4	19.9	19.7	19.3	19.0	18.5	18.3	18.0	17.8

Source: Author's calculations, December 2015; values for 2015 and 2016 are projections on the basis of preliminary values.

The size and development of the shadow economy is calculated using the MIMIC (Multiple Indicators and Multiple Causes) estimation procedure. Using the MIMIC estimation procedure one gets only relative values and one needs other methods like the currency demand approach or the income discrepancy method, to calibrate the MIMIC values into absolute ones. For a detailed explanation of these calculation methods, see Schneider (2011) and Schneider and Williams (2013). Due to space constraints, the econometric estimation results are not shown here; compare for example Buehn and Schneider (2012).

The calculated values for 2015 are projections for some countries, for 2016 they are projections for all countries, based on the forecasts of the official figures (GDP, unemployment, etc.) of these countries.

Table 4

6. 64 1 1	ny of five highly-developed n	T7 4 *	2002	2016 (* 0/	c cc · l CDD/

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	13.7	13.2	12.6	11.4	11.7	10.6	10.9	10.3	10.1	9.8	9.4	10.2	10.3	9.8
Canada	15.3	15.1	14.3	13.2	12.6	12.0	12.6	12.2	11.9	11.5	10.8	10.4	10.3	10.0
Japan	11.0	10.7	10.3	9.4	9.0	8.8	9.5	9.2	9.0	8.8	8.1	8.2	8.4	8.5
New Zealand	12.3	12.2	11.7	10.4	9.8	9.4	9.9	9.6	9.3	8.8	8.0	7.8	8.0	7.8
United States	8.5	8.4	8.2	7.5	7.2	7.0	7.6	7.2	7.0	7.0	6.6	6.3	5.9	5.6
Other OECD countries / Unweighted average	12.2	11.9	11.4	10.4	10.1	9.6	10.1	9.7	9.5	9.2	8.6	8.6	8.6	8.3

Source: Author's calculations, December 2015; values for 2015 and 2016 are projections on the basis of preliminary values.

Italy, Latvia, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, South-Cyprus, Spain, Slovakia, Sweden and the United Kingdom, whereas the shadow economy will increase in France, Hungary and Luxembourg. The strongest increase will take place in France from 12.3% of official GDP (2015) to 12.6% in 2016 and in Hungary from 21.9% of GDP in 2015 to 22.2% in 2016; the strongest decrease will be in Lithuania from 25.8% (2015) to 24.9% in 2016.

To summarize, in the vast majority of the 28 EU countries the shadow economy will continue to shrink, averaging 17.9% of official GDP in 2016. If we compare these results to the average size of the shadow economy of the 31 European countries, it was 22.4% in 2003, which shrank to 19.4% in 2008, then increased to 19.9% in 2009 and subsequently decreased to 18.0% in 2015 (see Table 3). In 2016 the average size will further decrease to 17.8%. When looking at the individual countries again, the shadow economy will decrease in Norway and Switzerland, whereas it will increase in Turkey from 27.8% (2015) to 29.2% of official GDP in 2016.

If we consider the development of the shadow economy of the highly-developed non-European OECD countries Australia, Canada, Japan, New Zealand and the US, we find a similar movement over time (see Table 4); in 2003 the shadow economies of these five countries had an average size of 12.2%, in 2008 this value was only 9.6%. In 2009 it increased to 10.1% and then decreased again to 8.6% of GDP in 2015. In 2016 the shadow economy will decrease in Australia, Canada, New Zealand and the US and it will increase in Japan from 8.4% (2015) to 8.5% in 2016, respectively. On average in 2016 the size of the shadow economy in these five countries will decrease to a value of 8.3%.

If we consider the size of the shadow economies over the last two years (2015 and 2016) and compare it to that of 2008/09, we realize that, in most countries, we will again see a decrease in the size and development of the shadow economy, which is due to the recovery from the worldwide economic and financial crises. Hence, the most important reason for this decrease is that, if the official economy is recovering or booming, people have fewer incentives to undertake additional activities in the shadow economy and to earn extra "black" money.

In short, there are four different developments with respect to the size of the shadow economy of these 36 European and non-European countries:

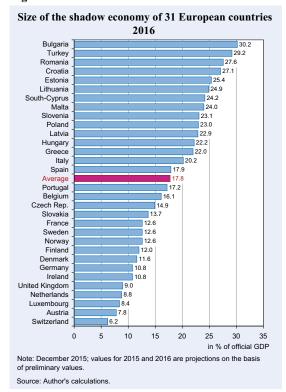
Table 5

Size of the shadow economy of various unweighted averages, 2003 – 2016 (in % of official GDP)

Average / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
28 EU-countries / Average (unweighted)	22.6	22.3	21.8	21.1	20.3	19.6	20.1	19.9	19.6	19.3	18.8	18.6	18.3	17.9
Three non-EU countries / Average (unweighted)	20.1	19.7	19.1	18.3	17.6	17.0	17.5	17.2	16.8	16.3	15.7	15.7	15.8	16.0
Five other OECD countries / Average (unweighted)	12.2	11.9	11.4	10.4	10.1	9.6	10.1	9.7	9.5	9.18	8.6	8.6	8.6	8.3
All 36 countries / Average (unweighted)	21.0	20.7	20.2	19.4	18.7	18.0	18.5	18.3	18.0	17.6	17.1	17.0	16.7	16.4

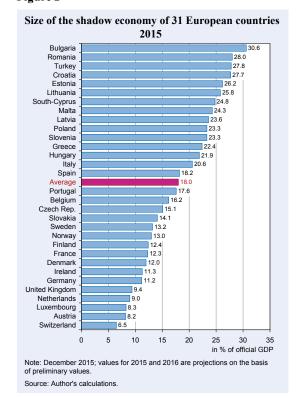
Source: Author's calculations, December 2015; values for 2015 and 2016 are projections on the basis of preliminary values.

Figure 1



- (1) In general, the shadow economy continues to shrink in 31 out of the 36 highly-developed countries, which is mainly due to a further recovery of the official economy. In five countries, by contrast, the shadow economy is growing due to a sluggish official economy or policy decisions that boosted the shadow economy.
- (2) The eastern or central European countries and/or the "new" European Union members, such as Bulgaria, Cyprus, the Czech Republic, Latvia, Lithuania and Poland have higher shadow economies than the "old" European Union countries, like Austria, Belgium, Germany and Italy. Hence, the size of the shadow economy grows from west to east.
- (3) An increase in the size and development of the shadow economy can also be seen from north to south. On average, the southern European countries have considerably larger shadow economies than those of central and western Europe. This can also be demonstrated by Figures 1 and 2.
- (4) The five non-European highly-developed OECD countries (Australia, Canada, Japan, New Zealand and the United States) have lower shadow economies that account for around 10.1% of GDP in 2009,

Figure 2



which will decrease to 8.3% in 2016 (compare Tables 4 and 5).

Summary and concluding remarks: problems and open questions

This article briefly presents the various methods for estimating the size of the shadow economy and shows the latest estimates of the size of the shadow economies of 36 highly-developed countries over 2005 to 2016. Differences in the development of the shadow economies of these 36 countries are also discussed.

What conclusions can be drawn?

- (1) Besides a general decrease in the size of the shadow economy from 2002 to 2008, we see an increase from 2008 to 2009/2010.
- (2) Since 2011 there has been no homogeneous development in the size of the shadow economy in these 36 countries over time.
- (3) To reduce the size of a shadow economy, different incentive-oriented measures should be used, such as temporarily exempting the value-added tax on labor-intensive products.

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ON DATA AND TRENDS IN INCOME INEQUALITY AROUND THE WORLD

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The extent, drivers and consequences of income inequality are one of the most hotly debated issues in politics and research in recent years. In response to the enormous interest in income inequality, a growing number of cross-national inequality databases are now available. This article discusses these databases and describes trends in income inequality (within selected countries) around the world.

Causes and consequences – why do we care about income inequality?

In the discussion on inequality it is important to distinguish between inequality of outcomes, and inequality of opportunities due to differences in circumstances that are beyond individuals' control.² However, opportunities and outcomes are closely related to each other, especially in an intergenerational context. Parental income and wealth, for example, may result from the parents' own efforts on the one hand, and may influence their children's access to a good education, healthcare services and the ability to earn a high income on the other.

Income inequality itself arises from a combination of an individual's effort and talent and his/her opportunities, for example socioeconomic background of his/her parents as well as access to education, healthcare and Apart from investments, research results suggest that income distribution within countries matters for sustainable growth by affecting diverse growth drivers, such as human capital accumulation, innovation incentives, labor productivity, and aggregate demand (for an overview, see Dabla-Norris et al. 2015, 6ff.; OECD 2015, 60ff.). Theoretical predictions and empirical evidence on the relationship of income inequality and economic growth are ambiguous.

On the one hand, higher inequality may shift the preferences of the population and politicians towards more regulation and redistribution policies such as, for example, greater protectionism and redistribution (e.g. via higher taxation), which may, in turn, hamper economic growth (see Okun 1975; Bertola 1993; Alesina and Rodrik 1994; Persson and Tabellini 1994; Perotti 1996; Claessens and Perotti 2007). Higher income inequality may also negatively impact health and education outcomes if access to education and healthcare primarily depends on income.3 This would result in lower growth rates due to the inefficient allocation of human capital and lower labor productivity in the long run than in more equitable societies (see Galor and Zeira 1993; Perotti 1996; Aghion, Caroli and Garcia-Penalosa 1999; Galor and Moav 2004; Stiglitz 2012; Cingano 2014; Ostry, Berg and Tsangarides 2014; OECD 2015).

On the other hand, some degree of inequality may provide incentives for people to make efforts, to invest and to move ahead in life, which could, in turn, boost education and innovation outcomes, entrepreneurship,

family background, gender, or location of birth.

financial services. If inequality undermines individuals' efforts, education choices and social mobility, however, citizens may lose confidence in institutions and the political system. Political and social instability due to inequality, in turn, may reduce investments and subsequently economic growth in the country (see Alesina and Perotti 1996).

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² Outcomes are, for example, income, wealth, expenditure, education, or health. Differences in circumstances beyond the individuals' control that may shape opportunities include, for example, ethnicity,

³ Low income earners have a budget restriction, as there is a fixed amount of income they need for consumption. Under the assumption of financial market imperfections, it is reasonable to assume that low income earners also have higher restrictions in their access to credits. Therefore, they do have less money to invest in education, which impacts the long-term productivity of the economy when the share of low income earners is high.

labor productivity, and thus economic growth (see Lazear and Rosen 1981; Barro 2000; Baumol 2007).⁴ As richer income deciles have higher saving rates than their poorer counterparts, income inequality is associated with higher aggregate saving (see Dynan, Skinner and Zeldes 2004). Higher aggregate savings may increase investment, production possibilities and in turn the output level for all individuals (see Kaldor 1955, Bourguignon 1981). Thus, income inequality is not necessarily bad. Instead, it could be a precondition for increasing everyone's income in real terms. In theory, everyone could be better off, even if inequality rises. Ultimately, this is an empirical question.

Empirics suggest a nonlinear relationship between income inequality and growth that depends on the inequality level, the time dimension, as well as the development level in the country in question. Barro (2000), for example, describes that the relationship between income inequality and economic growth is negative in less developed countries, but positive in advanced economies. Chen (2003) proposes an inverted-U relationship between initial income distribution and longterm growth. Halter, Oechslin and Zweimüller (2014) suggest that higher income inequality helps economic performance in the short-run but reduces economic growth in the long-run. Kolev and Niehues (2016) describe the relationship as positive for advanced economies as long as the net income inequality level is not too high.5

Due to the potential consequences of income inequality, the literature on this topic also discusses several possible drivers of income inequality such as technological change, globalization, financial deepening, outsourcing and offshoring-activities. These drivers may all change relative demand for factors like capital, and skilled and unskilled labor – and, in turn, the relative skill-premium (see i.a. Stolper and Samuelson 1941; Acemoglu 1998; Aghion, Caroli and Garcia-Penalosa 1999; Card and Dinardo 2002; Feenstra and Hanson 1996, 1999). Regional disparities, changing demographic and household composition, as well as policies like redistribution or de-regulation and changes in labor market institutions, may also affect the income distribution within countries (see i.a. OECD 2011; Peichl, Pestel and Schneider 2012; Dabla-Norris et al. 2015).

Measuring income inequality - concepts and pitfalls

Income inequality is typically measured by the income shares of the population (for instance, by deciles or quintiles), the relation of income shares (for instance, (for instance, the income ratio of the top 10% to that of the median income, "P90/50", to that of the lowest income decile, "P90/10", or to the income of the bottom 40%, "Palma Ratio") or indices like the Atkinson index, Theil index or Gini index. The Gini index is the most widely used measure of income inequality in cross-national databases. The index coefficient is derived from the Lorenz curve and is produced by the seminal work of Corrado Gini (1921).6 For a completely egalitarian income distribution, in which everyone in the population has the same income, the coefficient takes a value of 0. A Gini coefficient of 1 (or 100%) indicates that the total income of a country is concentrated in one person (or household), and all others have none - so it is the value of maximum inequality.

Gini coefficients are often non-comparable, because they are based on different sources and welfare concepts. Thus, there are different combinations in which Gini coefficients can be constructed:

Income or consumption/expenditure-based concepts

Gini measurements can be based on consumption and expenditure or the income of the observed statistical units. According to Atkinson and Bourguignon (2000), none of these concepts enjoys any clear advantage. On the one hand, consumption is smoother and less variable over time than income. African and Asian surveys, for example, prefer to collect detailed consumption data. On the other hand, the use of consumption raises problems of definition and observation. In the industrialized world, as well as Latin America, inequality is predominantly assessed with reference to income, not consumption (see Deaton and Zaidi 2002).

Labor and capital income

The total income of an economy can be allocated by labor and capital income – this reflects incomes based on wages or profits. Different datasets and studies use different measures to analyze inequality – such as inequality in wage incomes, overall labor incomes (including earnings by self-employment), or total incomes including capital gains (returns from investments). Scholars

⁴ Incentives also depend on fairness perception of wages (see Akerlof and Yellen 1990; Cohn, Fehr and Goette 2014).

⁵ The threshold is identified at a Gini net income inequality level of around 0.35 (Kolev and Niehues 2016).

⁶ Scholars have devised several variants of writing the Gini coefficient (see Yitzhaki 1998).

should be aware of the data they are using. Inferences can change by using different datasets and compositions of statistical units. Inequality in wages, for example, can rise if more people switch from unemployment into a low-wage-sector employment; simultaneously, overall household income inequality can decline, if these low-wage incomes generate higher earnings than unemployment benefits did previously. Battisti, Felbermayr and Lehwald (2016) show, for the example of Germany, that a low level of unemployment is likely to imply higher levels of measured inequality in wages among the employed, due to a change in the composition of the employed population. At the same time the low unemployment level is likely to diminish inequality among the working-age population as a whole.

Statistical unit, household definitions and equivalence scales

The unit of analysis can be based on the individual or household level. In practice, households are often used as the basic statistical unit. However, due to economies of scale in consumption, the needs of a household do not grow in a proportional way with each additional member. Therefore, household observations are often adjusted by equivalence scales to take into account the relative need of different household sizes and the age of its members. There is no standardized way of adjusting scales across datasets and surveys, such that a wide range of equivalence scales exists (see Atkinson, Rainwater and Smeeding 1995). Available datasets across and within countries often differ in household definitions and weighting by equivalence scales; and this may affect the comparability and validity of estimates.

Market or net income inequality

Inequality measures such as Gini coefficients can be provided by using the market income (total income before redistribution), or the net income (disposable income after redistribution by taxation and transfers) of the observed statistical unit.

Due to the bundle of possible combinations and differences, various databases can lead to different results and conclusions about inequality dynamics in certain countries and periods.

Atkinson and Brandolini (2001, 2009), for example, show how levels and trends in distributional data can be affected by data choices. Researchers using income inequality data to compare trends within or across coun-

tries should be aware of the pitfalls if they combine various data sources.

Cross-national income inequality databases

Inequality can be measured as income distribution among all people at the global level, the distribution of income between countries, and the distribution among people within countries. Table 1 presents several world income inequality databases with a main focus on the latter, its included indicators, as well as the coverage of countries and periods within the database, respectively. The databases are differentiated by the sources of the data included – microdata-based, secondary source-based, and imputation-based datasets.

The first group of datasets is based on microdata, primarily released from household surveys or official statistics on tax returns. There is a general consensus that the Luxembourg Income Study (LIS) is the best option for receiving comparable data across (high income) countries, because its reliable microdata is based on national household income surveys using a standardized questionnaire. LIS is the only source, to date, that provides inequality statistics by using a uniform set of assumptions and definitions based on microdata that has been harmonized to maximize its comparability (see Solt 2016, 2). Like many available standardized microdata-based datasets, LIS data are available for a small country sample and small number of country-year observations only, as the data is not collected every year. Non-standardized datasets, on the other hand, achieve greater coverage at the expense of less cross country comparability. This reflects the fundamental trade-off between a broader coverage of countries and time, and a greater comparability across countries and time (see Ferreira, Lustig and Teles 2015). The use and misuse of inequality datasets, together with the search for the best suitable dataset, featuring a big cross-national and temporal coverage, is under intensive discussion at present (see i.a. Ferreira, Lustig and Teles 2015; Jenkins 2015; Solt 2015; Smeeding and Latner 2015).

While bigger microdata-based datasets often have many gaps in country-year-observations, secondary source datasets like the World Income Inequality Database (WIID) by UNU-WIDER (2015) and the 'Allthe Ginis' dataset by Milanovic (2014) combine different datasets to achieve a higher coverage. Both Gini databases are closely related to the seminal Gini dataset work of Deininger and Squire (1996), which was of-

Table 1

			Selected incom	e inequality	datasets	
	Income inequality indicators	Welfare concept	Country coverage	Period coverage	Further comments on the dataset	Source
			Microda	ta based datasets		
CEPALSTAT.	Gini index; Theil index; Atkinson index; logarithmic variance; income shares; decile ratios.	Household gross income (=market income + transfers), not equivalence-scaled.	18 countries , Latin America and the Caribbean exclusively.	1989–2014	Ex-post standardization. Less standardized to achieve greater coverage and accurate calculation of indicators. Data released by national statistical offices.	UN CEPALSTAT; data available on: http://estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/Portada.asp .
Deininger-Squire.	Gini index; income shares of quintiles.	Household and individual income.	138 countries.	1890–1996	Household survey data.	Deininger and Squire (1996).
IDD (Income Distribution Database).	Gini index; average and median net household incomes; poverty indicators.	Equivalized household income (market, net, gross).	36 countries, primarily advanced economies.	1974–2014	Indicators are released by several country data providers, such as household surveys, tax registers and administrative records from national statistical offices, ministries or research institutes. Less standardized to achieve greater coverage and accurate calculation of indicators. Ex-post customized.	OECD; data available on: http://www.oecd.org/social/income-distribution-database.htm .
LIS (Luxembourg Income Study).	Gini index; Theil index; Atkinson index; income shares; decile ratios.	Equivalized household income and per capita income (market and net income).	48 countries, primarily advanced economies.	1967–2014	Ex-post standardization. Standardized questionnaire to achieve comparability across countries.	LIS Database; data available on: <www.lisdatacenter.org>.</www.lisdatacenter.org>
SEDLAC (Socio-Economic Database for Latin America and the Caribbean).	Gini index; Theil index; Atkinson index; income shares; decile ratios.	Household and per capita income.	23 countries, Latin America and the Caribbean exclusively.	1974–2014	Ex-post standardization.	CEDLAS and World Bank; data available on: http://sedlac.econo.unlp.edu.ar/eng/ >.
SILC (Survey of Income and Living Conditions).	Gini index.	Equivalized net household income.	36 countries, primarily EU-coun- tries.	2004–2015	Framework of harmonized variables, common guidelines, procedures, concepts and classifications to ensure comparability across countries.	me-and-living-conditions>.
PovcalNet, WDI (World Development Indicators).	Gini index; Theil index; income shares by decile.	Variation of per capita income and consumption, depending on country.	174 countries.	1974–2015	Based on household survey data. No harmonization across countries. Ex-post customized.	World Bank; data available on http://iresearch.worldbank.org/ PovcalNet/home.aspx>.
WID (World Wealth and Income Database); known as WTID (World Top Income Database) until 2015.	Income share earned by certain groups at the top of the income distri- bution (Top 10%, 5%, 1%, 0.5%, 0.1%, 0.01%, 0,005%).	Variation of household and per capita market income.	43 countries.	1810–2015	Microdata information released from tax returns.	Alvaredo et al. (2016); data availab le on http://www.wid.world. >.
WYD (World Income Distri- bution).	Average per capita income/consumption per decile.	Individual income and consumption.	approx. 120 countries.	1988–2008	Based on household survey data.	Milanovic (2002, 2005, 2012); data available on: http://go.wor-ldbank.org/IVEJIU0FJ0 ; and updated on Milanovic's university website.
			Secondary so	ources based data	sets	
ATG (All the Ginis).	Gini index.	Different welfare concepts depending on secondary source data.	166 countries.	1950–2015	All Ginis coming from nationally representing household surveys – released from various sources, such as published research papers, primary and secondary sources (e.g. LIS, SED-LAC, SILC, WYD, PovcalNet, WIID). Multiple entries for the same country and year.	Milanovic (2016); data available on: http://go.world-bank.org/9VCQW66L40 ; and updated on Milanovic's university website.
LM-WPID (Lakner-Milanovic World Panel Income Distribution).	"Global" Gini index; Atkinson index; Theil index; Theil index; Interpersonal global income inequality, based on national income deciles.	Average income or consumption of country-deciles. Per capita (no equiva- lence-scale effects).	162 countries.	1988–2008	Based on 565 different household surveys. Based on secondary sources (e.g. PovcalNet, WYD, LIS, SILC, and national household surveys). Household survey deciles are weighted by population. Each individual is assigned the income of his or her national income decile. Expressed in common currency and prices (PPP 2005).	Lakner and Milanovic (2015); data available on: http://go.worldbank.org/NWBUK13JP0 , and updated on Milanovic's university website.
UTIP (University of Texas Income Project).	Theil index; industrial pay-inequality measures.	Per capita income.	149–167 countries.	1963–2008	Derived from industrial, regional, and sectoral data, the World Bank's Deininger and Squire (1996) dataset, and other conditional variables.	Galbraith (2009); data available on: http://utip.lbj.utexas.edu/data.html >.
SIDD (Standardized Income Distribution Data- base).	Gini index.	Per capita, market income or expenditure.	143 countries.	1960–1999	Based on secondary source (namely WIID).	Babones and Alvarez-Rivadulla (2007).
WIID (World Income Ine- quality Database).	Gini index; deciles; quintiles; P5; P95.	Household net income or expenditure, with and without adjustment for household size.	179 countries.	1867–2012	Based on various secondary sources such as published research papers or primary databases (e.g. LIS, SEDLAC, WDI). Provides "best" Gini proposals.	UNU-WIDER; data available on: https://www.wider.unu.edu/project/wiid-world-income-inequality-database .
			Imputation	on based datasets		
GCIP Global Consumption and Income Project).	Gini index; Atkinson index; Theil index; mean to median ratio; Palma ratio; P90/P10; mean log deviation; income shares.	Monthly real consumption and in- come per capita levels; and shares by decile.	More than 160 countries.	1960–2015	Based on secondary sources and multiple imputation methods.	Lahoti, Jayadev and Reddy (2015); data available on: http://gcip.info/>.
SWIID (Standardized World Income Inequality Database).	Gini index.	Standardized adult-equivalent household market and net income.	176 countries.	1960–2015	Based primary and secondary sources (e.g. LIS, CEPALSTAT, SEDLAC, WDI, WIID). High coverage with respect to country-ye-ar-observations achieved through multiple-imputation-methods.	Solt (2016); data available on: http://fsolt.org/swiid/>.

Source: The author, updated by Kristin Fischer.

ten used in previous studies. WIID and 'All-the-Ginis' consist of a large set of inequality statistics from several primary microdata datasets, supplemented by data from published research papers. However, the included observations are largely non-comparable across countries or over time within a single country.7 Moreover, the global and constant adjustment strategies applied between the different measures across countries and time are likely to produce systematic errors in the data and estimation results. For example, Milanovic (2014) recommends using 'All-the-Ginis' in the empirical strategy by including dummy variables. The dummies are assumed to correct for different Gini coefficient types being used within the same regression. This approach implicitly assumes that differences between various coefficients, for example market and net income inequality measures, remain constant across all world regions and over time. This assumption seems to be quite unlikely.

A third group of databases, like the Standardized World Income Inequality Database (SWIID) by Solt (2009, 2016), uses various imputation-techniques to estimate the ratios of different coefficients and to create comparable data availability. SWIID also incorporates Atkinson and Brandolini's (2001) recommendations to provide the most comparable data available for broadly cross-national research on income inequality.

The more flexible adjustment procedure is the main reason why SWIID is preferable to 'All-the-Ginis' and WIID. Moreover, unlike most other databases, SWIID provides Gini inequality measures for market and net outcomes based on the same concept, and therefore allows to compare income inequality before and after redistribution. The new SWIID version 5.1 covers 176 countries between the years 1960 and 2015 and allocates more comparable country-year observations than any alternative database at that moment. The database uses the LIS series as a baseline to which other included source data is standardized. In the new expanded version, Solt (2016) uses information from more sources than previously to generate model-based multiple imputation estimates for the missing observations in the

Income inequality trends around the world

Studies measuring global income inequality among all people around the world show a very high level of inequality in per capita income disparities. However, due to the income convergence of several emerging countries, as well as a reduction in global poverty rates, a trend towards a decline in inequality has emerged over the last few decades (see Milanovic 2013; Lakner and Milanovic 2015; Lahoti, Jayadev and Reddy 2015).

I use market and net income Gini coefficients from from Solt's (2016) SWIID to present some trends in within-country income inequality for selected countries around the world in Figures A-D. The gap between market and net income inequality indicates the redistributive power of the welfare system of each country: the higher the gap, the higher the equalization of incomes by taxes and transfers (redistribution). The figures also include the 95%-confidence region of each country-year Gini coefficient estimate to illustrate the uncertainty of each estimated Gini coefficient. The figures show that estimates of the Gini indices are more certain in more recent years. Moreover, there is a lack of Gini observations in several countries in previous years, even in some developed countries such as Austria, Luxembourg or Switzerland, which is particularly pronounced prior to 1980.

In most Western European countries market income inequality has increased since the early 1980s (see Figures A). Net income inequality, however, has not risen as

LIS series.⁹ By exploiting systematic relationships between different Gini types, the Gini coefficients of the SWIID are estimated on the basis of eleven different combinations of welfare definitions and income scales.¹⁰ Nevertheless, there are some criticisms concerning the reliability of the results based on Solt's imputation technique strategy – especially for less developed countries, which provide few and less reliable baseline observations (see Jenkins 2015; Solt 2015; Wittenberg 2015).

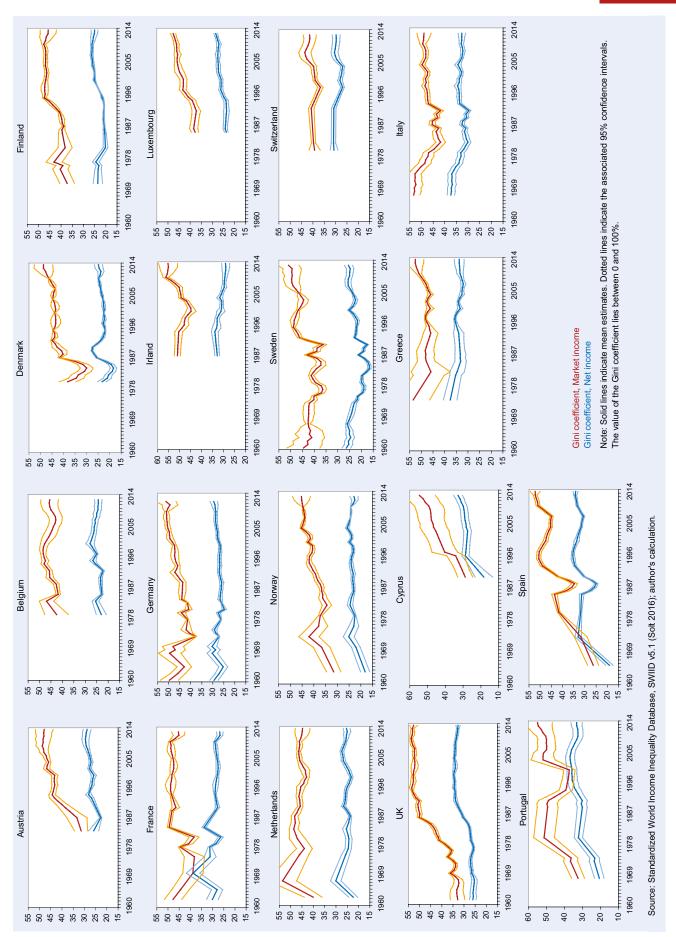
⁷ Such combined databases may also suffer in reliability and comparability due to different compilers of the included datasets.

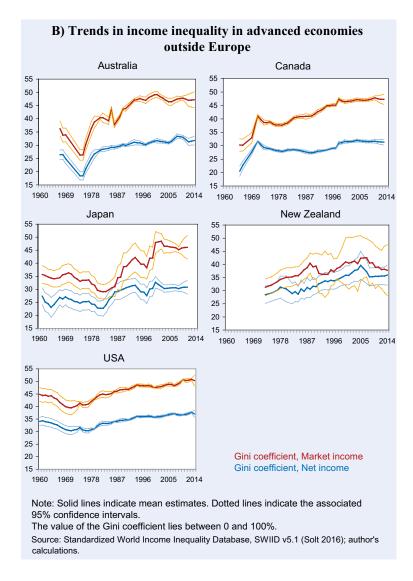
Nevertheless, many country-year observations for earlier years, as well as for more recent years are not available in SWIID v5.1, too.

The SWIID employs a custom missing-data algorithm that minimizes reliance on problematic assumptions, by using as much information as possible from proximate years within the same country-to estimate inequality statistics for the missing country-years in the Luxembourg Income Study. The additional data is drawn from regional collections, national statistical offices, and academic studies (see Solt 2016). In the earlier SWIID versions, Solt (2009) only used the World Income Inequality Database (WIID) as a source for the imputations; in his fifth version, two other sources are incorporated: the University of Texas Inequality Project (UTIP), as reported by UNIDO (see Galbraith 2009), and the World Wealth and Income Database (WID) by Alvaredo et al. (2016).

An additional advantage of Solt (2016) is the provision of estimates of uncertainty and the data of 100 multiple Monte Carlo simulations for his imputation estimates, which allows users to do additional robustness tests on the dataset.







dynamically or has even remained at the same level. Thus, the European welfare states still seem to have the ability to compensate the overall market trend of rising income inequality. In France and Norway, for example, net income inequality is at the same level as it was 35 years ago and market income inequality has even declined in France in recent years – after remaining fairly constant previously. In the Netherlands, both, market and net income inequality have remained constant around the same Gini coefficient level for the last 35 years respectively. While market and net income inequality soared in the UK and Ireland in the 1980s, net inequality has started to decline slightly in recent years.

In some generous welfare states like Denmark, Finland or Sweden, the Gini net income inequality index is around 0.25 nowadays and, thus, higher than the Gini index points of around or below 0.20 seen in these countries in the 1980s. Market income inequality has

also increased substantially in these countries since the 1980s. Nevertheless, the Scandinavian countries are still among the most equal societies around the world. In Germany and Austria, net income inequality has been fairly constant at around or below a Gini coefficient of 0.26 between 1980 and 2000, but net inequality subsequently increased to its present level of 0.29.

Southern European countries like Italy, Greece, Portugal and Spain have seen volatile trends in market and net income inequality. However, net income inequality increased in Italy, Portugal and Spain during the 1990s, and decreased slightly afterwards. Overall, net income inequality in Southern Europe in the years prior to the financial crisis was relatively at the same level as in the 1980s. Since the financial crisis, income inequality has risen in Greece and Spain. In Portugal, however, only disparities in market outcomes have risen in recent years.

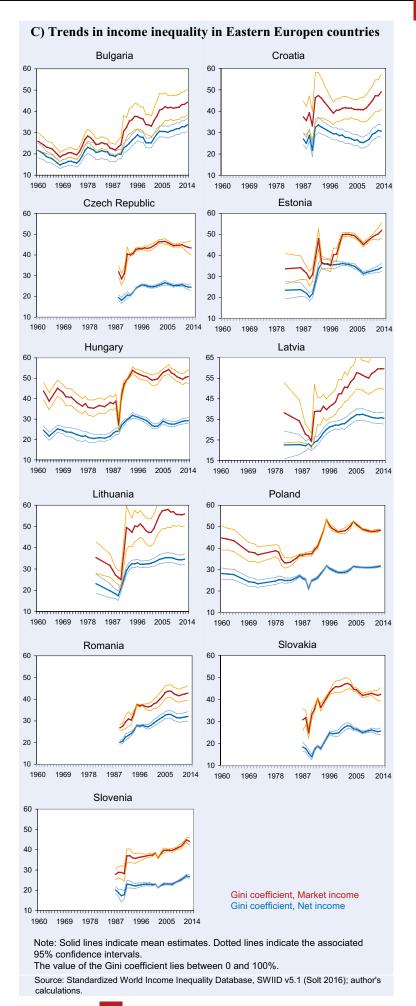
Similar trends to those in Europe can be observed in other ad-

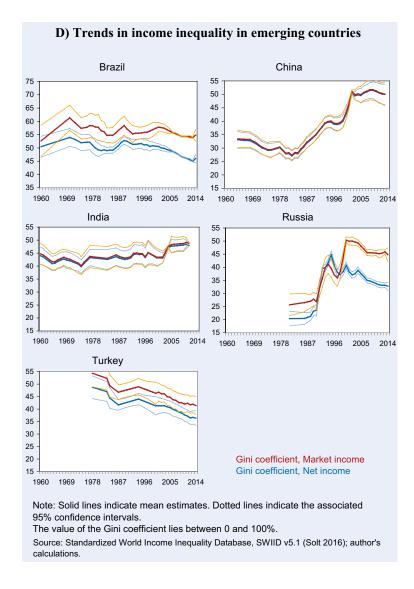
vanced economies and welfare states (see Figures B). In Australia and the United States, income inequality decreased up until the 1970s. Since then, market and net income inequality have risen in both countries. While the pace of growth in inequality has slowed down in Australia since the 1990s, it has remained unchanged in the United States. In Canada and New Zealand no more growth in income inequality has been detected in recent years. In Canada, income inequality decreased in the 1970s and rose in the 1990s, and has remained relatively constant ever since. In New Zealand, income inequality rose between 1980 and 2005, but even declined in the following years. In Japan, the Gini coefficients decreased until 1980, then increased enormously until the early 2000s, and have remained relatively constant ever since.

Figures C show the Gini income inequality trends in Eastern European transition countries. The countries had relatively low levels of income inequality during their communist eras. After the fall of the Berlin wall and the start of the economic and democratic transformation income inequality soared. The inequality jump, however, was merely a level effect in most of the transition countries. After reaching its new level, income inequality remained relatively constant or even declined in almost all Eastern European transition countries. In Bulgaria, Croatia, Estonia, and Slovenia, by contrast, (net) income inequality has risen again in recent years.

Figures D describe the trends in the BRIC countries and Turkey. Like the other Eastern European transition countries, Russia experienced a jump in income inequality during its transition era in the early 1990s. Since 2000, however, market and net income inequality has declined in Russia. In China, within-country income inequality decreased until the mid-1980s and subsequently increased dramatically in the course of the country's enormous economic growth until the 2000s. However, while income inequality within China increased, global income inequality decreased due to the rise of China (see i.a. Milanovic 2013; Lakner and Milanovic 2015; Lahoti, Jayadev and Reddy 2015). In India, Gini inequality coefficients have increased, especially since 2000. As in China, that may primarily be due to the onset of massive economic growth. In Brazil and Turkey, however, income inequality has tended to decline over the course of their economic catching up process spanning the last 35 years.

The results show that there is no overall global trend towards higher income inequality within countries. However, the Ginis





increased substantially in many highly-developed countries between 1980 and 2000, but have followed heterogeneous trends in these countries ever since. In Eastern European transition countries, as well as China and India, income inequality increased enormously during their transition processes or after opening up to the world market. However, income inequality has remained relatively constant or even decreased in many transition countries during the 2000s. Other emerging countries, such as Turkey and Brazil, have even experienced an overall decline in income inequality in recent decades. The same is true of Latin America in general (see Tsounta and Osueke 2014).

Concluding remarks

Several cross-national income inequality databases are available for research. This article describes the different concepts underlying such databases. In general, there is a trade-off between the coverage of countries and years on the one hand, and the comparability of the results between countries and years on the other. Authors should be aware of potential pitfalls in using and interpreting inequality datasets.

This article uses Gini indices of market and net income inequality to describe inequality trends within selected countries. Gini is widely used to present income inequality trends within countries and comparisons across countries. However, Gini indices also have some shortcomings: firstly, the data for the Gini calculations are often based on household surveys, which do not always represent incomes correctly. For example, it is assumed that in surveys, the rich do not report their actual income or do not respond at all.11 Moreover, changes in the Gini index can either come from the top end of distribution or from the bottom (see Voitchovsky 2005). The same Gini value may result from different distribu-

tion curves. Trends in Ginis make it hard to understand which part of the income distribution is changing and who really gains or loses. Other measures of inequality, for example income shares by income groups, may be helpful for interpreting changes in income inequality. Furthermore, the underlying demographic structure should be taken into account. Inequality changes can be driven by shifts in the demographic structure within a society, for example different fertility, mortality and migration patterns among different income groups. Changes in the share of old or young dependents due to an aging population or a baby boom may also cause changes in income inequality, even if the real income distribution among adults of a working age remains constant. Scholars and politicians should be aware of these relationships when they are drawing policy implications from income inequality trends.

¹¹ Income inequality could therefore be underestimated, if data compilers do not correct such a biased response behaviour in the data.

Inequality increases per se should not basically be denied. Income inequality can have positive and negative consequences, depending on its causes and the inequality level within a society. In some growth and redistribution scenarios, for instance, income inequality may be a precondition for everyone being better off in real terms. Political decision makers are, indeed, faced with an equality-efficiency trade off (Okun 1975). However, the level of inequality in opportunities and social mobility is closely linked to the perception of fairness and social justice within a society. In this context, politicians should focus more on inequalities in opportunities to achieve incomes, than solely on the outcomes themselves.

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PROMOTING ELECTRIC VEHICLES IN GERMANY VIA SUBSIDIES — AN EFFICIENT STRATEGY?

CLAUDIA KEMFERT¹

Electric mobility is becoming increasingly attractive: in big cities and metropolitan areas the quality of life is rising as more electric cars generate less noise, as well as lower emissions and particulates. Fossil fuels nevertheless still account for an extremely large share of the transportation system, as over 95% of all vehicles use conventional fuels. The transportation sector produces over 20% of all global CO2 emissions. In view of more ambitious climate goals and emissions reduction targets of up to 80% in the decades ahead – as set out in the most recent climate policy agreement reached in Paris - a sustainable mobility strategy needs to substantially increase the share of alternative and climate-friendly transportation technology and fuels. Electric mobility is indeed one component of a sustainable mobility strategy. With an increased share of electric vehicles and renewable energy for electricity production, emission reduction goals could be met. Not only electric cars, but also rail traffic and transport (including commuter railway systems) are now electric. Individual electric mobility could be a good complement to the existing rail transport system. Electric vehicles do not produce particulates, noise or other emissions and therefore meet several criteria for sustainable and climate-friendly mobility. Batteries of electric vehicles could be a storage option for volatile renewable energy. Decentralized electricity distribution grids could be unburdened by a higher share of storage batteries. Moreover, positive environmental effects could be achieved if electric vehicles were not filled with climate-unfriendly coal electricity, but with renewable electricity. Electric vehicles always need to be combined with a strictly sustainable transportation strategy (Dijk, Kemp and Orsato 2012).

Germany's electric vehicle plans

Germany's aim is to put one million electric vehicles on the road by 2020 and six million by 2030 (Die Bundesregierung 2011). Germany's federal government established a national strategy with the overarching aim of taking the market lead and becoming the key provider of electric vehicles in Germany (Die Bundesregierung 2014, 2015). Its main goals in promoting plug-in electric vehicles are to reduce dependency on oil product imports, to decrease carbon dioxide emissions and to strengthen the car industry's competitiveness (Federal Government of Germany 2009). Current sales figures show, however, that electric vehicles are still a niche product and far from diffusing into a mass-market (Bakker, Engels and van Lente 2012). Today, approximately 12,200 pure electric cars in Germany are on the road and about 85,500 hybrid cars (Kraftfahrt-Bundesamt (Federal Motor Transport Authority) 2016).

Plug-in electric vehicles are defined as vehicles featuring a battery that can be charged by electricity. Plug-in electric vehicles include battery electric vehicles, plug-in hybrid electric vehicles and range extended electric vehicles. While battery electric vehicles operate exclusively on electricity without any other power source, plug-in hybrid electric vehicles and range extended electric vehicles have internal combustion engines that are supplemented by an electric power train. Hybrid electric vehicles combine an electric power train with internal combustion engines, but cannot be charged by electricity (Bundesministerium für Umwelt 2014).

The diffusion of electric vehicles remains very slow as there are still substantial technical, social, and economic barriers to be overcome (The German National Platform for Electric Mobility 2013). When compared to internal combustion engine vehicles, electric vehicles perform relatively poorly in terms of total cost of ownership, vehicle cost, driving range, charging times and charging infrastructure (Transportation Research Board 2013).

According to the annual report of the Federal Motor Transport Authority, only around 26,000 battery electric vehicles and approximately 131,000 hybrid electric vehicles were registered by mid-2016. Compared to 54.6



¹ DIW Berlin

million registered automotive vehicles in Germany, battery electric vehicles have a market share of around 0.7% (Kraftfahrt-Bundesamt 2016).

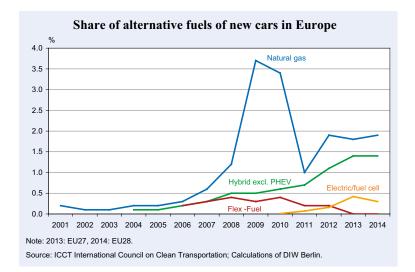
In order to reach the goal of one million electric vehicles on German roads, the government decided to pay a subsidy to car buyers. A buyer's premium of 4,000 EUR is paid for the acquisition of an electric car. Half of the buyer's premium is paid by the government and half of it by electric car manufacturers.

Experiences from other countries

In many countries, electric vehicles are financially subsidized. Although nearly all countries subsidize electric mobility, the total share of new electric cars is still very low at around 0.1% of total new cars (OECD/IEA 2016 and IEA 2013). In Europe, this share also lies below 1%, while hybrid cars account for 1.5 % of new cars (see Figure 1 and Table 1). Electric vehicles enjoy their largest market share in Norway, which has the highest number of electric vehicles per capita in the world.

In 2015 the market penetration of registered electric vehicles on Norway's roads surpassed the share of 20%. The financial promotion system started as early as 1990 with the temporary abolishment of an import tax that was made permanent in 1996, along with an accompanying reduced annual registration tax. In 2000 the company car tax was reduced. The maximum combined incentives available could amount to 17,524 EUR per electric vehicle in 2011 (JATO 2011), while the total subsidies and tax break savings, both upon purchase

Figure 1



and recurring, could amount to 16,910 EUR per electric vehicle

In the Netherlands the share of electric vehicles reached around 9%, versus approximately 2.3% in Sweden and 1.2% in France. In other nations market shares were in the range of around 1% (China) or below (US, Canada, Japan, UK and also Germany). Although the number of charging stations has been increased, it still remains very low (US: 12,100, China: 8,300, France: 8,000 and Germany: around 5,000). Many countries offer tax exemptions like, for example, the US with tax reductions of 7,500 USD or Canada with about 8,500 USD per electric car and free use of car lanes. Almost all countries charge no motor vehicle taxes for electric cars.

An explicit buyer's premium is offered in countries like France (6,500 EUR plus 10,000 EUR for old diesel cars), China (6,000 EUR and car permit), Sweden (4,500 EUR), Japan (6,500 EUR) and the UK (25 % of new car value). As the share of conventional cars in these countries is still very high, a buyer's premium for electric vehicles may not be a relevant economic driver for boosting the market. Technical barriers, such as the driving range, batteries and charging stations, tend to dominate as a result. Promotion and support policy strategies for electric vehicles should therefore primarily focus on reducing technical barriers. The introduction of a large number of charging stations, as well as an increase in the driving range of cars, would also be more promising.

China provides a one-off bonus for battery electric vehicles depending on their battery range and electric vehicles are exempt from acquisition and excise tax

> (Mock and Yang 2014). Incentives are paid to the auto-industry and are expected to trickle down to price reductions in the end product. China is the only country that provides vehicle production subsidies to the industry (Lutsey 2015). Local governments have also implemented their own respective local subsidies: in the city of Shenzhen, for example, the government offers up to 60% discounts on locally-produced new energy vehicles (Tagscherer 2012). This has the effect of further stimulating the local/regional electric vehicle industry. Some provinces and cities such as

Table 1

	2008	2009	2010	2011	2012	2013	2014	2015	2016	Sources
Australia						0.11%				ev-sales
Austria						0.26%	1.20%			(Shahan 2014) & Adapted from (ACEA)
Belgium						0.17%	0.42%			(Shahan 2014) & Adapted from (ACEA)
Brazil										
Canada				0.00%	0.10%	0.20%	0.30%	0.40%		OECD/IEA. 2016
China			0.00%	0.00%	0.10%	0.10%	0.40%	1.00%		OECD/IEA 2016
Cyprus										
Czech Republic							0.30%			Adapted from (ACEA)
Denmark						0.29%				(Shahan 2014)
Estonia						0.73%	1.92%			(Shahan 2014) & Adapted from (ACEA)
Finland						0.17%	0.41%	0.64%		(Shahan 2014) & Adapted from (ACEA)
France				0.10%	0.30%	0.50%	0.70%	1.20%		OECD/IEA 2016
Germany				0.10%	0.10%	0.20%	0.40%	0.70%		OECD/IEA 2016
Greece							0.09%			Adapted from (ACEA)
Hungary										
Iceland					0.21%	0.94%				ev-sales & (Shahan 2014)
India			0.00%	0.00%	0.10%	0.00%	0.00%	0.10%		OECD/IEA 2016
Ireland						0.08%		0.49%		(Shahan 2014) & Adapted from (Ieahev 2016)
Israel										(
Italy					0%	0.10%	0.10%	0.10%		OECD/IEA 2016
Japan		0.00%	0.10%	0.40%	0.50%	0.60%	0.70%	0.60%		OECD/IEA 2016
Korea				0.00%	0.10%	0.15%	0.10%	0.20%		OECD/IEA 2016
Latvia							3.02%			Adapted from (ACEA)
Malta										
Monaco										
Netherlands				0.20%	1.00%	2.50%	3.90%	9.70%		OECD/IEA 2016
New Zealand										
Norway	0.20%	0.10%	0.30%	1.50%	3.20%	5.80%	13.70%	23.30%		OECD/IEA 2016
Portugal				0.10%	0.10%	0.20%	0.20%	0.70%		OECD/IEA 2016
Romania										
Slovakia							0.23%			Adapted from (ACEA)
Spain				0.10%	0.10%	0.10%	0.20%	0.20%		OECD/IEA 2016
Sweden				0.10%	0.30%	0.50%	1.40%	2.40%		OECD/IEA 2016
Switzerland				0.1070	0.5070	0.44%	1070	1.70%		(Shahan 2014) (Ieahev 2016
Turkey						J. 11/0		1.7070		(2.1.1.1.1.2011) (Touriev 2011
UK				0.10%	0.10%	0.20%	0.60%	1.00%		OECD/IEA 2016
US			0.00%	0.10%	0.40%	0.60%	0.70%	0.70%		OECD/IEA 2016
World Total									0.10%	OECD/IEA 2016

Beijing, Shanghai, and Guangdong provide additional bonuses that may double the incentive provided at the national level (Mock and Yang 2014).

In Japan, electric vehicle incentives are based on the price difference between the electric car and its conventional gasoline counterpart. The maximum subsidy available is equivalent to around 6,300 EUR (Lutsey

2015). The government program was launched in 2009 and has gradually become less generous over the years. Furthermore, electric cars are exempt from acquisition tax based on vehicle price and engine displacement (Mock and Yang 2014).

South Korea's ministry of the environment provides a nationwide electric vehicle subsidy of 9,000 EUR for each car, and 3,000 EUR for the installation of slow chargers, with another 3,000 EUR available in tax support (Ieahev 2016). The hybrid electric vehicle subsidy budget is only 750 EUR per vehicle, while an additional 2,000 EUR is available in tax cuts (Ieahev 2016).

In the Netherlands, cars with zero CO2 emissions are exempt from registration and ownership tax – for vehicles with emissions there is a differentiated and progressive tax system based on the vehicle's CO2 emissions (OECD/IEA 2016). Electric vehicle users enjoy a lower surcharge on income taxes for the private use of company cars. The tax advantage amounts to around 2,000 EUR per year compared to a conventional company car (NEA 2015).

France introduced a "bonus-malus" scheme in 2008 and its government supports the purchase of low-emission vehicles. Electric vehicle car owners get 6,300 EUR, while hybrid car owners are given 1,000 EUR. Penalties for high-emission cars can reach up to 8,000 EUR per car. The scrap disposal of diesel cars is subsidized by up to 10,000 EUR per car (Tietge et al. 2016).

In the US there is a federal subsidy program worth up to a maximum of 7,500 USD in the form of a tax credit, which depends on the battery capacity of the vehicle (Mock and Yang 2014). The upper boundary of 7,500 USD is reserved for long-range plug-in hybrid electric vehicles (Lutsey 2015). In California another subsidy program exists at the state level. Buyers of battery-powered electric vehicles are given an additional 2,500 USD, whilst plug-in hybrid electric vehicle buyers are granted 1,500 USD in a one-off bonus payment (Mock and Yang 2014). An even greater amount is granted to low-income consumers. Additionally, there are annual fee exemptions for electric vehicles (OECD/IEA 2016).

Buyer's premium in Germany – an efficient strategy?

The very strict buyer's premium, however, may not be an efficient instrument for increasing the share of electric vehicles. Electric vehicles remain unattractive as long as conventional mobility has a competitive advantage. Electric mobility needs a high density of operational charging infrastructure. A buyer's premium additionally benefits high-income families, who might not replace a conventional car with an electric vehicle, but may add one to their existing fleet. Such a second or third car purchase, however, does not lead to a sustainable mobility strategy.

Electric mobility is merely one module among many. As long as diesel cars in Germany are indirectly subsidized by tax reductions and there is no overall strategy for environmentally-friendly transportation, a buyer's premium for electric vehicles is myopic and not sustainable.

Electric mobility needs support. Germany should not lose its grip on this important market, or it will fail to meet the targets that it has set itself. The electric vehicles market is underdeveloped and growing too slowly. Competitors from other nations are increasingly leading the market, not only by producing the cars, but also the batteries essential to them. Years ago German battery producers enjoyed a competitive advantage, but lost it as other manufacturers outperformed them. Germany's competitive advantages can only be reinforced with a coherent and sustainable transportation policy.

Backward transportation policy in Germany is also responsible for the misery of lost competitiveness thanks to lobbies for low-emission standards in Brussels. There is still no real policy commitment to systematically making German transport systems more sustainable. Initial steps in the right direction would be to abolish diesel tax exemptions and to promote cars powered by alternative fuels such as natural gas, or "power to liquids" options and work on an effective traffic avoidance, optimization and environmental strategy. The avoidance of diesel tax reductions - 18 cent/liter lower taxes on diesel than on gasoline - would boost German revenues by 7 billion EUR per year. In other words, an 18 cent/liter increase in diesel tax would raise tax revenues by 7 billion EUR per year. This money could be spent on promoting a sustainable transportation policy.

Traffic congestion cannot be avoided with electric cars. Sustainability also cannot be achieved, as the share of coal is still high in Germany and produced and "tanked" electricity is still dirty. Germany should start a coal phase-out. Electric vehicles need to be filled with electricity from renewable energy to make them environmentally-friendly. Freight and goods traffic should also

be made more sustainable by using climate-friendly fuels and rail transport.

Sustainable transportation means that unnecessary traffic is avoided, traffic optimization is implemented, multi-modal systems need to be supported and different forms of traffic are better interlocked and oriented towards climate protection. Climate-friendly fuels need to be used in the road, rail and aviation transportation areas and public transportation needs to be better connected with car sharing systems and bicycles. In the future, mobility services will be purchased in metropolitan areas, not cars. The rail transport system should be strengthened by avoiding unnecessary disadvantages of this means of transport. New and efficient transportation technologies are needed urgently.

Climate-friendly policy concepts should support railway transportation, raise emissions standards, promote environmentally-friendly fuels, and avoid the tax advantages of conventional fuels, especially diesel. An overall strategy should optimize traffic flows and infrastructure. Natural gas vehicles are more climate-friendly than diesel and gasoline cars, but enjoy fewer advantages.

The German car sector, especially component suppliers, are crucial to the economy and employ over 700,000 workers nationwide. With alternative drive engineering, technology and fuels, new markets could be developed and value added and jobs created. The "diesel scandal" provided impressive proof of how harmful such a strategy is for a whole sector and the economy. It should be a wake-up call for changing firm strategies for a climate-friendly future. The economic opportunities of a sustainable mobility are huge. The later the start of the transformation, the more expensive the new start will be. In an increasingly globalized world there is also a growing danger that the necessary logistical interconnections will be lost.

A buyer's premium for electric cars might sound alluring to policy makers. However, without an effective strategy for a truly sustainable transportation policy, and when keeping advantages for conventional fuels, such a premium will neither support the transformation required, nor will it create the necessary markets as it should. If combined with a sustainability and environmentally- and climate-friendly strategy, however, it might be a right step into the future. An efficient strategy would be to first implement a transportation policy that reduces the advantages of conventional fuels and cars, while supporting the transportation of goods and

people via rail, and promoting car sharing concepts and bicycle use in metropolitan areas. In the absence of such a strategy, a buyer's premium for electric cars is a waste of money. With all these sustainability strategies, however, a higher share of electric vehicles is clearly needed – and a financial support a clever concept.

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PRESERVING GOVERNMENT SOLVENCY: A GLOBAL POLICY PERSPECTIVE

Andrea Rieck and Ludger Schuknecht¹

Introduction

The global financial crisis has left us with the highest public debt stock since the Second World War. It exceeds 100 percent of GDP in many countries, including Italy, the US, Japan and Spain and it exceeds the EU Maastricht threshold of 60 percent in almost all major industrialised countries. This limits governments' policy room for manoeuvre and makes us vulnerable to future crises. At the same time, private sector debt has been rising to historic highs too. The problem is no longer limited to some – seemingly – distant parts of the world. It has become a global challenge affecting advanced, emerging and developing economies at the same time.

In addition, most advanced and many emerging economies are expected to encounter an unprecedented period of population ageing with major increases in ageing-related expenditure over the coming decades. Finally, the experience and perception of governments as insurers of last resort at the national and international level for all kinds of calamities – including bank bail-outs, environmental problems, and international financial crises – has raised the scope of the additional implicit or contingent liabilities of public sectors (Schuknecht 2013).

Politicians, academics and market participants are holding heated debates on the right way forward. Many see an urgent need to reduce debt in order to raise the prospect of sustainable public (and private) finances in the long run, and more resilience to crises and spillovers in the short run. Otherwise, we may risk a more serious and even systemic global fiscal crisis.

¹ Federal Ministry of Finance, Germany (both).

In this article, we present an analysis of the existing debt overhang and look at ways to resolve it and prevent future over-borrowing. In the next section we present some trends in public and private sector debt around the globe, which increasingly call sustainability into question. The subsequent section describes different approaches to dealing with a debt overhang. Building on past experiences with these approaches, we discuss the institutional settings needed to achieve and preserve debt sustainability in the following section. The last section concludes with a call for an institutional framework that aligns individual incentives with the common goal of stability.

Unhealthy debt levels

Concerns about public debt levels are no longer only an issue for developing and emerging economies. Nor is the increasing private sector debt stock a source of vulnerability for advanced economies alone. Unhealthy debt levels have assumed a potentially systemic dimension. This was revealed rather starkly when the fiscal-financial crisis in Europe spread from Greece to Spain and Italy in 2011–12.

Since the 1970s, public debt in advanced economies has been increasing steadily. A big increase has taken place since the outbreak of the international financial crisis in 2007. Public sectors have transferred large amounts of private sector debt onto their balance sheets, thereby further aggravating the already existing detrimental fiscal trends.

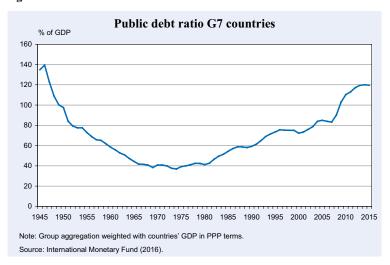
The aggregate debt ratio of G7 countries has reached its highest point since World War II (Figure 1). Following some consolidation efforts and the recent moderate economic recovery, public debt ratios are expected to peak in most advanced economies, but hardly any decline is discernible in the years ahead. Although starting at a much lower level, public debt in many emerging markets has also been on the rise, particularly in resource-rich countries suffering from low oil and gas prices (IMF 2015b).

Private sector debt in several advanced and some emerging economies are at problematic levels too





Figure 1



Declining trend growth in advanced economies and a succession of economic, fiscal and/or financial crises around the globe have exposed the limits of the debt-based global growth model. Financial boom-bust cycles may have contributed to the downward trend in potential growth observed over recent decades.2 Apart from undermining growth and efficiency, credit-fuelled boom-bust cycles have also had disruptive distributional implications via the allocation of losses within and contagion across countries.

(Table 1). Australia, the Netherlands and Switzerland stand out in terms of household debt, while China, France and Sweden exhibit elevated levels of corporate debt. Looking at total non-financial private sector leverage, Canada, Australia and China have the highest levels among G20 countries with around 200 percent of GDP, while a number of others have also reached levels well above the EU's indicative warning threshold of 133 percent.

According to BIS data (Cecchetti, Mohanty and Zampolli 2011), public and private non-financial sector debt taken together in 18 OECD countries almost doubled, from 167 percent to 314 percent of GDP, within three decades between 1980 and 2010. McKinsey Global Institute (2015) found a similar pattern when adding up public and private debt including the financial sector. The aggregate leverage of 47 advanced and emerging economies reached 286 percent of GDP in 2014, an increase of USD 112 trillion or 40 percentage points since 2000.

A growing number of economists and institutions are pointing to the risks of rising indebtedness. The political economy literature has explained public deficit and debt biases as a result of politicians' incentives to burden future generations with the costs of public programmes. This literature has also identified rules and institutions as a solution, e.g. balanced budget rules or quantitative debt limits (Buchanan and Wagner 1977; von Hagen 2005; von Hagen and Harden 1994; Strauch and von Hagen (Eds.) 2000).

High debt levels can place a drag on economic growth, limit the scope for policy action during acute crises, and increase financial market vulnerabilities (BIS 2015).

Approaches and experiences

There are five – actual or alleged – options for resolving a debt overhang, all of which have been pursued to a differing extent at various times.

"Organic" debt pay-down

The organic approach envisages a steady redemption of public debt through growth-friendly fiscal consolidation. Smaller deficits or even fiscal surpluses and higher economic growth bring public debt ratios down.

Successful consolidation means more than simple budgetary cuts. It includes a reprioritisation of fiscal means towards growth-enhancing expenditure such as infrastructure and education, a streamlining of public sectors, and supply-side reforms of labour and product markets. In general, expenditure reforms are more likely to succeed than tax increases, which are usually accompanied by distortions to private-sector activity (Alesina and Ardagna 2012; Alesina and Perotti 1996). The size of the public sector can be reduced by re-focusing on the provision of essential public goods, streamlining social welfare and privatising business activities. Similarly, the government's role in stimulating the economy is most effective when limited to providing a functioning framework for the private sector to prosper, while automatic fiscal stabilisers reduce demand volatility over the cycle. Apart from sound public finances, such a frame-

² Borio et al. (2015) argue that credit boom-induced capital and labour misallocations undermine productivity growth during a boom as well as afterwards.

Table 1

Total debt by sector (excluding the financial sector) in percent of GDP

	Level in 2014				Change since end–2007 ¹			
	House- hold	Corpo- rate	Govern- ment ²	Total	House- hold	Corpo- rate	Govern- ment ²	Total
Advanced economies ³	74	89	96	259	-4	4	32	32
United States	78	68	88	235	-17	1	38	21
Japan	66	103	209	379	0	4	59	62
Euro area	61	103	92	257	2	6	25	33
France	56	122	95	273	10	18	30	58
Germany	55	55	75	185	-8	0	10	2
Italy	43	79	132	254	6	6	30	43
Netherlands	113	124	68	305	4	-1	24	28
Spain	73	114	96	284	-7	-8	59	44
Australia	116	75	30	221	10	-3	22	29
Canada	93	103	64	260	17	14	15	46
Hong Kong SAR	64	218	5	287	13	87	3	103
Korea	83	104	38	225	11	14	14	43
Singapore	60	80	99	239	21	24	12	57
Sweden	83	166	41	290	19	36	1	56
Switzerland	120	90	34	245	12	19	-6	25
United Kingdom	88	77	88	253	-7	-9	46	30
Emerging markets ³	26	88	42	156	10	33	2	44
Argentina	6	10	43	59	2	0	-4	-2
Brazil ⁴	25	47	62	134	12	19	-2	29
China	35	154	41	230	16	53	6	76
India	9	51	66	126	-2	9	-9	-1
Indonesia	17	22	25	64	6	8	-9	5
Malaysia ⁴	68	62	53	183	13	0	11	25
Mexico	15	21	33	69	2	7	12	21
Russia ⁴	19	50	15	86	8	10	5	26
Saudi Arabia	11	37	2	50	-1	4	-19	-16
South Africa	38	33	53	123	-4	-1	20	16
Thailand	68	50	30	148	23	4	7	34
Turkey	21	51	34	106	10	27	-8	29

¹ In percentage points of GDP. ² BIS Credit to the government at nominal values except for Korea for which only market values are available. ³ Weighted averages of the economies listed based on each year GDP and PPP exchange rates. ⁴ Breakdown of household debt and corporate debt is estimated based on bank credit data. Sources: IMF; OECD; national sources; BIS database on total credit.

Source: Financial Stability Board (2015).

work also includes a reliable political, legal and judicial system, efficient labour markets and sensible regulation of product, service, and financial markets.

Successful episodes of organic debt reduction can be found e.g. in Belgium and Sweden from the mid-1990s until the global financial crisis. Belgium succeeded in

reducing its public debt ratio from more than 130 percent of GDP in 1995 to about 87 percent in 2007. Sweden slashed public debt from over 70 percent of GDP in 1996 to below 37 percent in 2008, while also building up significant government pension assets. In both countries public deleveraging was accompanied by far-reaching expenditure reforms and drastic cuts in the size of the

state, including the rationalisation of welfare systems and improved fiscal governance (Tanzi and Schuknecht 2000; Hauptmeier, Heipertz and Schuknecht 2007).³ Such an approach has also been successfully applied in several European countries to halt adverse debt dynamics since the crisis (Hauptmeier, Sánchez-Fuentes and Schuknecht 2015).

While this strategy of debt reduction seems to be the least distortive and most lasting approach, it comes with an important challenge. Unfortunately for politicians, it requires a considerable

adjustment, which is often unpopular with the domestic electorate. If it involves cuts to the privileges of special groups of the population who have a disproportionately large say in collective decision-making, such adjustment becomes even more difficult. The tangible fruits of necessary reforms are often only reaped by successor governments. Nevertheless, comprehensive reform is not necessarily detrimental to re-election (Alesina, Carloni and Lecce 2011).

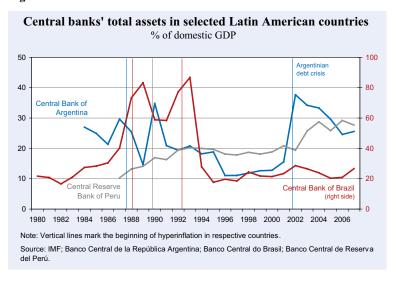
Monetisation and financial repression

Monetisation of public debt and financial repression redistribute wealth from creditors to debtors through an ultra-expansionary monetary policy that erodes the real value of debt via negative real interest rates.

The benign aim of expansionary monetary policy, including quantitative easing and extremely low interest rates, is to stimulate economic growth and prevent hysteresis directly after a crisis. Low interest rates also help debtors grow out of debt by limiting their debt service costs and by stimulating economic activity via the credit channel.

However, central banks can also monetise public debt by acquiring government bonds on the primary or secondary market, thereby steadily inflating their balance sheets. When money supply far exceeds the liquidity needs of the domestic banking sector, the central bank's

Figure 2



role expands from "lender of last resort" for commercial banks during a liquidity crisis to "lender of last resort" for governments. In the past this has frequently led to accelerating inflation via cash and credit creation, expectations, and contracting money demand.

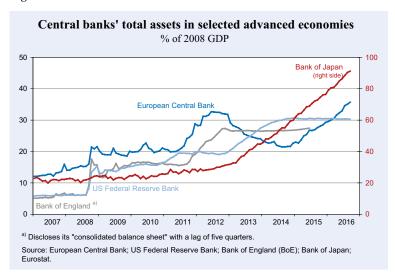
But even without accelerating inflation, central banks' loose policies can reduce interest rates to negative real or even negative nominal territory. This gradually reduces the real value of the debt stock (financial repression or "cold" monetisation).

Other policy tools that can help put public debt at a funding advantage over other liabilities include preferential treatment of government bonds in bank regulation, political interference in bank governance bodies or moral suasion on domestic financial institutions (Reinhart and Sbrancia 2011). Central banks can also "monetise" debt held in the private sector, for example, by buying mortgage-backed debt securities, by lending against very poor collateral, or through emergency liquidity assistance to commercial banks that are only notionally solvent. Such central bank subsidisation of private debt may appear to politicians to be an easier alternative to the socialisation of losses via public budgets or the risk of private agents bearing the costs of bankruptcies.

Experiences with monetisation and financial repression over the last hundred years are mixed, at best, and the risk of losing control over inflation is always present. In Latin America the dramatic increase in the size of central banks' balance sheets led to hyperinflation in several countries in the late 1980s and early 1990s and to sovereign insolvency in Argentina in the early 2000s. This

³ The fiscal rule in Sweden requires a surplus in net lending of the public sector of 1 percent of GDP on average over a business cycle. The rule was introduced in 1998 and, after a transition period, became fully effective in 2000 (Jonung 2014).

Figure 3



approach also proved to be a failure in Germany in 1923, when all government bonds ended up in the hands of the central bank and disastrous hyperinflation wrecked the economy. By contrast, after the two World Wars, a number of advanced economies managed to use financial repression for public debt reduction without losing monetary control. However, this typically required extensive government intervention in capital allocation.

Recently, experiences with central banks' zero-interest rate and asset purchase policy in advanced economies have proven relatively benign to date. Economic growth has returned, while inflation expectations in all advanced economies remain anchored at low levels. Institutional credibility has probably facilitated a situation whereby financial repression via balance sheet expansion can go much further than previously thought. Balance sheet expansion in the US, the UK, the euro area and Japan has nevertheless reached similar proportions as in Latin America during the 1980s until 2002 (Figures 2 and 3). Moreover, the limit to balance sheet expansion in advanced economies before disorderly developments and "hot" monetisation and inflation set in is not yet known.

There are important risks to both monetisation and financial repression. As mentioned, when central banks take on fiscal responsibilities, they may eventually lose control over monetary policy. Other negative side effects are capital misallocation, the zombification of banks and corporations, and asset price bubbles as interest rates lose their signalling role. As mentioned, subsequent inefficiencies in the real economy and possible financial crashes could both cause a long-term drag on growth.

On the policy side, the ability to borrow cheaply creates moral hazard for governments. The resulting lack of policy adjustment in turn increases the need to continue the extraordinary monetary stimulus. The redistributional effect from creditors to debtors not only affects the state and the financial sector, but also has an impact on society. Wealthy households with a diverse portfolio can hedge against inflation more effectively and are better placed to benefit from asset price increases, including shares and real estate, while the middle class suffers from low returns on ordinary sav-

ings and old-age provisioning (Schuknecht 2013).

International insurance

Countries may also seek international assistance or "insurance" when highly indebted. International insurance can work explicitly through existing institutions such as the IMF and multilateral development banks, new institutions such as the European Stability Mechanism (ESM) and the Banking Union in Europe, or implicitly through "hidden" channels such as the European settlement system TARGET2.

Disorderly sovereign default would come at economic and political costs to the country concerned and, in an interconnected world, to others as well. Therefore, there is a collective interest in stabilising an ailing economy and avoiding spillovers, especially if it is unclear whether the country is illiquid or insolvent. In order to prevent temporary (liquidity) assistance from becoming a bailout, reform incentives that address the roots of a crisis need to be maintained. To this end, international financial assistance usually applies an adapted form of the Bagehot principle of lending to solvent parties at high rates against good collateral: In times of crisis, such international insurance provides temporary liquidity support in exchange for reform conditionality and assumes a preferred creditor status vis-à-vis pre-existing creditors

Experiences with international insurance mechanisms have been mixed. Several countries in Europe have used international financial assistance in return for domes-

tic reforms. Ireland, Spain, Portugal and Cyprus successfully concluded the adjustment programmes set up during the European debt crisis. In Greece, programme implementation has been more challenging, as domestic ownership has been weak and uneven adjustment efforts have hindered the economic recovery. There are also several examples of IMF programmes outside Europe where successive financial assistance packages have ultimately failed, illustrating that international insurance is no panacea.

It is important to remember that the credibility of international insurance mechanisms is based on reliable and financially robust shareholders. Financial assistance by the IMF has essentially been based on loans being provided by strong member countries such as the US and other advanced economies. More recently, an increasing share has also come from strong emerging markets.

For all insurance mechanisms, it is true that risks do not disappear by simply shifting them onto somebody else. Only risk reduction - through national fiscal adjustment and structural reforms, cleaning up banks' balance sheets, etc. - allows debtors to regain stability and win back confidence. If, however, the necessary conditionality is softened to an extent that programme targets and debt sustainability can no longer be achieved, there is a risk of overburdening solvent sovereigns - or central banks. The world came close to the latter situation in 2011 when governments discussed (and eventually rejected) the idea of having the IMF print Special Drawing Rights in order to lend these monetary means on to crisis-stricken countries. International insurance can only work in a sustainable way if the anchor role of financially strong members is preserved and the number of insurance cases is kept limited.

Sovereign debt restructuring

An over-indebted country may choose default over monetisation. The reduction of a government's debt can take place in the form of a write-off on the nominal value or a reduction in net present value terms through maturity extension, grace periods or lower coupon payments, for instance.

A sovereign default would entail high economic and political costs. However, a lack of debt sustainability cannot be addressed with the temporary liquidity assistance envisaged in international insurance schemes. If public debt is no longer sustainable, it is less detrimental to re-

alise losses in a timely manner than risk a steady and long-lasting economic and political degradation (IMF 2013)

Debt restructurings to date have tended to be ad-hoc exercises. Evidence on whether they have been adequate in terms of volume, timing, and management is inconclusive. In the early 1990s, Latin American states and a few other countries saw a restructuring of their debt through the Brady bond initiative. This usually implied debt forgiveness of 30–35 percent, although individual arrangements differed in their terms, volume and participation (Cline 1995). While the initiative was quite successful at the time, public debt in beneficiary countries has subsequently risen again. The default by Argentina in 2001 was not resolved until 15 years after the event.

In 2012, the private sector granted relief on Greek debt, which resulted in a cut in the face value of participating bonds of over 50 percent and reduced Greece's public debt stock by about EUR 107 billion, corresponding to 50 percent of its GDP at the time (Zettelmeyer, Trebesch and Gulati 2013). The 2015 deal for Ukraine included a 20 percent upfront haircut on the bonds held by private sector creditors, resulting in immediate relief of USD 3.6 billion or 4.3 percentage points of the country's debt-to-GDP ratio. The global restructuring of low-income countries under the Heavily Indebted Poor Country (HIPC) Initiative led by the IMF and the World Bank entailed total costs to creditors of USD 75 billion in end-2013 present value terms (IMF 2014).

A significant challenge to public debt restructuring is its timing and legal framework. Market confidence is likely to take a hit and a disorderly procedure may prolong the period that a restructured country is shut off from international capital markets.

Reining in private sector debt

While the above-mentioned approaches relate directly to public sector debt, instruments to rein in excessive private sector debt are an important complement. Otherwise, public budgets remain exposed to vulnerabilities arising from spillovers from over-indebted households, companies, and the financial industry.

Individual actors behave most responsibly when they are held accountable for their actions and have to bear the consequences of their decisions. If they have reason to expect that someone else will foot the bill, they may

take on excessive risks. Therefore, responsibility and decision-making power need to go hand in hand to avoid moral hazard. To protect this principle and keep incentives aligned, public bail-outs of private sector risks should generally be ruled out. A limited and conditional public bail-out should only be considered in exceptional cases of significant spillovers to other countries or segments of the economy that do not bear responsibility for the crisis.4 In order for such cases to remain rare exceptions and limited in volume, private sector risks need to be kept in check so that they do not grow to become systemically important. In this respect, tax systems should be designed in a way that does not reward higher indebtedness. In addition, regulatory and macroprudential measures may be needed to avoid excessive debt and exaggerated asset prices.

Yet what we see in many countries is the opposite or deficient. Non-performing loans, especially in some European countries, still represent a heavy burden on the banking system and impede the overall economic recovery.⁵ The transmission of monetary policy easing is hampered if banks cannot increase their lending due to legacy problems. To be fair, there has been some progress in individual cases, such as Spain and Ireland, which – helped by their financial assistance programmes – embarked on a deleveraging path involving the establishment of bad banks, the restructuring of viable banks, and improvements to their insolvency regimes.

As with the solutions to resolve the public debt overhang, reining in private sector debt is politically not easy. Governments can only influence private sector decisions indirectly by setting the right incentives. This includes vigilant supervision, appropriate regulation, macroprudential policies and the elimination of adverse fiscal/tax incentives. In a globalised world, regulation is most effective when it is internationally coordinated so as to minimise the side-stepping of rules or unfair competition.

The need for institutional reforms

The growing public debt burden over recent decades, the huge socialisation of private debt in the context of the financial crisis, unsustainable social spending trends, and the limited ability of governments to undertake fiscal and structural reforms have raised the spectre of more outright or indirect government default in the future, even in advanced economies. Efforts to stabilise markets, banks and governments post-crisis has left our system with little resilience to further adverse developments, and we do not know how much scope for more debt there is before confidence caves in.

Moreover, the consensus to deal with the debt overhang via orderly pay-downs (in line with contracts and ex ante expectations of creditors and debtors) seems to have been replaced by the tacit expectation and desire on the part of many to get at least some help from financial repression, inflation or international risk shifting. With debt, moral hazard has increased as well. Central banks are also at risk of being compromised by so-called fiscal dominance, where fiscal (and/or financial) stability risks could hamper their ability to adjust interest rates in a timely fashion.

All this goes hand in hand with a serious and potentially destabilising deterioration in institutional frameworks aimed at preserving hard budget constraints and fiscal solvency. Fiscal rules that aim to address government deficit and debt biases have eroded in line with a more cavalier view of deficits and debt. The European Stability and Growth Pact is a case in point. Private sectors have been given the impression that public balance sheets are readily available for debt shifting in the context of crisis-related bail-outs.

Nevertheless, it is important to carry out a conceptual and empirical analysis of what could work and what has worked in preventing and resolving over-indebtedness in the most market economy-friendly manner. Constitutional economics, or the related concept of *Ordnungspolitik* in Germany, emphasises the importance of rules and institutions to provide the right, time-consistent incentives for economic actors. Hard budget constraints, with economic actors taking responsibility for gains as well as losses resulting from their actions, constitute the appropriate macro- and micro-economic principles to guide the design of such institutions. Conditionality must continue to make financial assistance politically costly in cases where it cannot be avoided.

⁴ For the prerequisites of successful banking crisis resolution, see Lindgren, Garcia and Saal (1996).

⁵ According to IMF (2015a), gross non-performing loans as a percentage of total loans in 2014 stood at around 45 percent in Cyprus, 35 percent in Greece and 20 percent in Italy.

Public debt – achieving and preserving sustainability

As regards public debt, there are easy institutional solutions to this problem, the most simple of which is a balanced budget requirement. In principle, a balanced budget requirement is a guarantor of fiscal sustainability. The German and Swiss *Schuldenbremse* (debt brake), the Maastricht Treaty requirements, and balanced budget requirements for most US States are good examples of such institutional safeguards.

Balanced budget rules may not only be excellent preventive devices. Over time, they may also contribute to resolving debt overhangs. As mentioned above, Sweden as of the mid 1990s is a prominent example in this regard.

However, such rules have proven difficult to implement in the past for reasons related to transparency, political economy and ideology. First, all fiscal responsibilities, including contingent and implicit ones, have to be included. Fiscal accounting and transparency, however, remains a major challenge in many countries. Government guarantees to the private sector or regional bodies and future social security obligations are often not provisioned for in annual budgets. Balanced budget rules may then not provide a full picture; they may even encourage liabilities to be moved off budget.

Perhaps even more importantly, the design of fiscal rules is crucial. Such rules should not allow too much leeway for interpretation. Incentives for strict implementation and provisions for enforcement need to be sufficiently strong. This is the only way that the political economy-related deficit bias can be broken. The European Stability and Growth Pact does not entirely live up to these requirements: rules are often complex (after two rounds of revisions that addressed symptoms, rather than causes) and provide leeway for almost any possible interpretation. This leeway is prone to being taken advantage of in the course of politicised implementation, and there is a lack of enforcement provisions. German and Swiss rules are stricter. However, the Schuldenbremse has not yet been tested in bad times, at least in Germany. In any case, the more credibly a nobail-out regime is communicated and implemented, the higher the efforts of a government to actually observe its fiscal rules are likely to be.

A third obstacle is the prevailing macroeconomic doctrine advocating fine tuning and deficit spending. Just as in the 1970s, "naïve" Keynesianism provided the intellectual underpinning to deficit spending in bad times that

never stopped in better times. Under the pretext of continued weak demand, fiscal consolidation has basically stopped throughout the industrialised world, although deficits in several countries continue to be very high.

Central banks - rebuilding credibility

Developments relating to the quasi-fiscal role of central banks are possibly the most worrying. Zero interest rate policies coupled with massive QE programmes have reduced market monitoring and incentives for fiscal discipline. Once this has happened, it is hard to convey credibly to governments that it will not happen again. An eventual exit to normal size balance sheets and interest rates could well lead to major financial and economic upheaval.

Nevertheless, it is important to recall the "old" principles of sound central banking and reflect on the implications for the future central banking order. Institutional and policy independence remains critical. But what should this imply for the future? Two ideas are to ensure that there is more accountability to the public rather than to politicians and markets; and to fill positions on central bank boards with end-career personalities, rather than inept politicians or captured bankers.

The time-tested Bagehot principle for monetary operations needs to be re-established. The inability of a commercial bank to provide high-quality securities or to pay penalty rates to receive emergency liquidity should lead to the bank's restructuring or resolution. Monetary policy should not get involved in fiscal or quasi-fiscal policies. This is the role of national or international assistance programmes where conditionality limits moral hazard and fiscal dominance. A great deal of further thinking will be needed on this important challenge in the years ahead, as the debate on the future anchoring of monetary institutions and their credibility is only just beginning.

International insurance - preserving the IMF-based order

Unfortunately, the possibility that government entities might get into financial trouble cannot be ruled out. If this happens to a city or a region, the federal government might provide conditional support or let the entity fail. But if whole nations are at risk of going bankrupt, the costs of economic and political destabilisation in that country and via global interlinkages might be too high.

To prevent moral hazard, the principle of lending against conditionality is essential. The political stigma of "having to go to the IMF" (and the ESM in Europe) constitutes such a cost and should continue to work as a deterrence. In fact, the IMF is a strong institution in this regard and provides an important international stability anchor. IMF support should therefore remain a prerequisite for other international and regional safety-net lending. This also holds for Europe, where demands for ESM lending without IMF involvement seem motivated by a desire to benefit from solidarity without conditionality, thus violating the two principles specified above. But the IMF has also been subject to a number of demands to soften national budget constraints via unconditional international insurance. A lively debate on the future institutional design of global financial safety nets and the balance of incentives can also be expected in this area.

International debt restructuring – strengthen institutions via a contractual approach

Despite the above-mentioned international insurance, there are instances in which a country is unable to repay its legacy debt. Rather than resorting to indirect default via financial repression or inflation, debt restructuring may well be desirable for both debtors and creditors. Again, this should take place in an appropriate institutional context. Conditionality should ensure an adequate participation of debtor countries by making sure that domestic incomes and assets are taxed and state assets are liquidated.

Moreover, the process should be orderly. A contractual insolvency procedure could give the necessary clarity to a restructuring process, ensure efficient risk pricing beforehand, and keep incentives aligned. Such a restructuring regime would serve as a tool for crisis resolution and, perhaps more importantly, crisis prevention, as it would strengthen market discipline on the part of both creditors and debtors. To this end, debt relief should mainly be at the expense of private creditors so as to guarantee future market monitoring as a deterrent against renewed indebtedness. Restructuring should be commensurate with the solvency problem and ensure that the country can make a fresh start.

Timing is a challenge. When restructuring is done too early, it imposes undue costs on the creditor, while the debtor government could avoid necessary adjustment efforts. When done too late, many private sector creditors

can exit prior to the event and thus shirk responsibility. This further aggravates the financial situation and unnecessarily raises the costs for the country in question, the remaining bond holders and global taxpayers. The other challenge is collective action. Without appropriate aggregation clauses, there is a risk that holdout creditors seek preferential treatment via litigation – at the expense of those creditors negotiating in good faith. The better the timing, the more orderly the process, and the better the policy programme accompanying a debt deal is, the better the prospects for a swift return of trust and credibility, low losses and, ultimately, market access.

Recent initiatives in this regard have been quite promising. Euro area members and a number of other governments have included collective action clauses in all new central government bonds. This is the basis for an orderly negotiation process. In order to prevent the socialisation of private losses via international financial assistance, an IMF-supported programme should include the prolongation of bonds held by the private sector. Such prolongations could apply in cases where a country applying for financial assistance has lost market access, exhibits public debt or financing needs above a certain threshold, and its debt sustainability is in doubt. In some cases mandatory debt restructuring may also be required. Changes in IMF procedures have been moving in this direction.

The euro area crisis and notably the Greek experience have shown that avoiding adverse feedback loops between banks and governments is essential. An excessive exposure of banks to certain governments could undermine required private sector bail-in if there is a risk of spreading financial instability. It is therefore essential to break the bank-government loop by removing regulatory privileges for government bonds on banks' balance sheets, notably their exemption from risk-weighted capital requirements and from large exposure limits.

Apart from addressing the debt overhang, the mere existence of an orderly debt restructuring option would already work as a crisis prevention tool, as it would enhance market discipline and, thereby, reduce governments' debt bias.

Private debt – promoting private sector responsibility

Finally, institutional solutions could reduce public sector risks arising from private sector exposures. The real economy and the financial sector have an inherent incentive to socialise private debt. It is therefore important to have strong property rights underpinned by a well-functioning legal and judicial system that make market transactions and the enforcement of contracts cheap and reliable. This deters debtors ex ante from opportunistic debt accumulation. While this suggestion is almost embarrassingly common place, things often look different in reality and there is a great need for action, not least in Europe, as many indicators and anecdotal evidence show.

Moreover, capital and ownership structures, notably in the financial sector, have been deficient in the past, meaning that governments could all too easily be blackmailed into expensive bail-outs. There has been significant progress in this area. The global community has embarked on an ambitious financial regulation agenda under the auspices of the FSB, while Europe has made progress towards a level playing field and coherent application of rules through the Banking Union's single supervision and bank resolution framework. Notable enhancements are global requirements for more capital (core and contingent) and bank resolution plans, especially for systemic players. Bail-in requirements have been enshrined in (European) law, thus protecting tax-payers from private losses migrating onto public balance sheets. It is now crucial to implement these agreements.

Conclusion

Global over-indebtedness poses systemic risks to economic growth and stability. There has recently been some progress in deficit reduction and the stabilisation of the debt stock. However, little, if any, progress has been made in deleveraging in the public and private sectors.

There is also good news and bad news in Europe. EU members found an appropriate response to the financial and subsequent debt crisis; but once immediate stability risks abated, complacency set in. This is all the more worrisome as systemic risks from global debt trends loom large.

In this article we argued that the debt crisis was the result of an institutional crisis. To preserve solvency, we called for an institutional framework that aligns individual and political incentives with the global interests of stability and sustainability. Hard budget constraints for public and private sector debt are one side of the

coin. The other side are transparent, effective rules and de-politicised enforcement procedures that ensure compliance. Discipline can only be re-established when all actors (politicians, investors, corporations and the financial industry) are held accountable for their decisions.

Picking up on Buchanan's ethical debate on public debt (Buchanan 1987), we do not see default as a solution to remedy a possible "immoral" use of money borrowed by the government in the past. Instead, we agree with Brennan and Eusepi (2002) that spent money, whether it has been used efficiently or not, cannot be recouped by reshuffling claims and liabilities between present bond holders and tax-payers. Similarly, we do not see inflation and financial repression as an acceptable way out of debt. The people who are likely to bear the costs of such implicit default are the middle classes. Let's not prove Marx right after all in his view that capitalism, market economies and democracies destroy themselves. Instead, we need to strengthen national and international institutional underpinnings to ensure that contracting parties are able and willing to serve their obligations. This would seem to be the best way to prevent and resolve over-indebtedness.

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Institutional Dimensions of Successful Labor Market Integration of Refugees

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In 2015, Europe witnessed an extraordinarily high number of asylum seekers. Germany alone registered an estimated 890,000 individuals as asylum seekers in its EASY system², corresponding to 1.1 percent of its total population (BMI 2016). With European natives facing this influx in addition to regular non-humanitarian migration, fears surfaced about the successful integration of those who stayed.

Europe, in particular Germany, is in need of innovative institutions to assure labor market integration. We argue that an extension of available integration support institutions to asylum seekers marks an important first step toward better integration.

This article begins by commenting on historic labor market integration in European countries, with a focus on Germany. Next, the article presents a selection of integration support institutions as put forward by the OECD and evaluates a selected group of countries. As part of the evaluation, this overview suggests further potential steps in order to ensure the successful integration of the current influx of asylum seekers.

Current migrant labor market integration of foreign-born population

Prior to the recent influx, overall labor market integration of the foreign-born population in Europe has been improving, with employment levels surpassing pre-crisis levels by the end of Q3 2014. Among its European peers, Germany achieved one of the highest migrant employment rates and one of the lowest risks of long-term unemployment for migrants (OECD 2015).

While overall this might seem encouraging in regard to prospects of integration, the current migrant influx

of refugees³ and asylum seekers into Europe is qualitatively and quantitatively different than previous inflows, with far more individuals who have far fewer resources. One driver of this trend is that forced migration does not allow for specific human capital investments prior to migration. Moreover, and compared to regular migration, asylum seekers often migrate to countries who accept them as opposed to those with which they have existing (economic) links. In addition, asylum seekers generally lack documentation certifying their qualifications (OECD 2016a).

Key integration support institutions for asylum seekers in OECD countries

The following section discusses a range of integration support institutions that are considered to be important for the successful labor market integration of asylum seekers at an early stage after their arrival and before they are accepted as refugees. These institutions have been proposed by the OECD (2016a) and are based on the organization's work on integration policies. The OECD considers that the following five institutions are crucial: language training; adult education combined with long-term language training; skill assessments; civic education and job-related training. Table 1 also displays additional information on the average duration of the asylum procedure (with respect to its duration until a decision in the first instance) and the extent to which asylum seekers have access to the labor market. The assessment is based on the latest OECD data; as also reflected in the DICE Database (DICE Database 2016a; DICE Database 2016b). It is important to note that the following overview is subject to rapid change, as many countries are adjusting their policies in 2016 and the numbers of arrivals are fluctuating. Moreover, the availability of institutions refers to asylum seekers, as opposed to accepted refugees or other immigrants.

In Table 1, we focus on a number of OECD member countries of special relevance to our discussion. As it had the highest total number of first time asylum applicants in the 12 months prior to June 2016 amongst all European OECD countries (Eurostat 2016), the primary focus will be on Germany. In addition, we chose six European countries for the following reasons: Scandinavian countries on grounds of their history of accepting comparably high numbers of refugees in the past (Denmark, Sweden); the next two largest

¹ Ifo Institute (both)

Number denotes all individuals registered as asylum seekers in the EASY system in 2015. These individuals are likely to seek asylum and apply formally. However, registration in the EASY system is not equivalent to having formally filed a request for asylum. Individuals are considered refugees once they have successfully gone through the application process.

Refugees defined as asylum seekers granted asylum.

Table 1

	Integrat	ion support instit (OEC)	Additional information (OECD data)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Language training	Adult education combined with long-term lan- guage training	Skills assessment	Civic education	Job-related training	Average duration of asylum procedure (to decision in first instance)	Labor market access
Austria	No	No	No	Yes ^{a)}	No	6 months	Yes
Denmark	Yes	No	No	Yes	No	2.5 months	Yes
France	No	No	No	No	No	7 months	Yes
Germany	Yes	No	Yes	Yes	No	5.3 months	Yes ^{f)}
Italy	Yes	Yes	No	Yes	No	3.5 months	Yes
Sweden	Yes	No	No	No	No	7.5 months	Yes ^{g)}
Turkey	Yes ^{b)}	No	No ^{c)}	No	Yes ^{d)}	Not available ^{e)}	Yes

a) In Vienna only. b) Conditional on holding an internship. c) Except for specific professions. d) In textile, computer and internet use, handcrafts, hairdressing, agriculture, animal breeding. c) Applications shall be finalized within 6 months by law. f) Except asylum seekers from safe countries of origin (BAMF 2016). g) Only for asylum seekers with valid IDs.

Source: OECD (2016a) – Merger of Table 1, columns (1) – (6) and Table 2, column (7); Heading based on Table 1; Annotations based on Tables and overall OECD report.

Euro-economies on grounds of similar economic means as Germany (France, Italy) and two countries with a comparatively high relative influx of asylum seekers (Austria, Turkey).

Language training: refers to native-language courses. Germany offers language training to asylum seekers from countries with high acceptance prospects, as do Denmark, Italy, Sweden and Turkey. Germany offers 600 hours of publicly-financed language education with no maximum period of entitlements. Austria and France, in contrast, do not offer institutionalized language training. While the general provision is beneficial for integration, matching supply and demand locally remains a challenge.

Adult education combined with long-term language learning: refers to adult education measures in general such as evening classes, which are accompanied by long-term language training (as a specific long-term type of language training in general, as opposed to one-off up-front language trainings) (OECD 2015). While Italy provides obligatory adult education with language training, Austria, France, Denmark, Germany, Sweden and Turkey do not offer adult education with language training. Germany does offer some optional adult education with transport reimbursement and childcare. However, its non-obligatory nature implies that actual participation rates are likely to be lower than for its obligatory counterpart in Italy, for example. In turn, lower participation is expected to increase necessary welfare

transfers in the long run. Germany could hence seek to adopt Italy's policy of an obligatory program.

Skills assessment: refers to assessments of asylum seekers' previous work experience and certifications. Skills assessments are a vital way of measuring the amount of human capital flowing into a country, allotting resources more effectively and ensuring that refugees do not end up in jobs for which they are overqualified. Germany offers skills assessment, while the other countries do not. It started piloting its early intervention program in 2015 and offers further qualification assessment under its "Professional Qualifications Assessment Act" to asylum seekers with high likelihood of a positive decision (European Parliament 2016). While both programs are still at an early stage, they can be considered an important step in the right direction. Other countries should seek to build on Germany's approach in this regard.

Civic education: refers to civics classes. Austria, Denmark, Germany and Italy all offer such classes, while France, Sweden and Turkey do not. Civic education may not necessarily be essential to labor market integration, but it likely facilitates political and social integration.

Job-related training: refers to all forms of training that are aimed at employment prospects (OECD 2015) of asylum seekers. Only Turkey provides job-related training to asylum seekers whose applications are not yet decided on, though only in a small number of fields. Germany and other OECD countries should consider

following Turkey's lead, especially given the current waiting times until decisions are made.

Labor market access: refers to the possibility of asylum seekers entering the labor market. This issue is particularly pressing in countries that require a significant waiting for recognition; most countries in 2016 have a significant waiting period. The OECD (2016a) emphasizes that asylum seekers from countries with high recognition rates in particular should be granted preliminary access to the labor market. They could also be required to undergo an initial waiting period or to take tests of labor market relevant qualifications. OECD countries have implemented such measures with a variety of nuances. Most selected countries (except Sweden) impose an initial waiting period. Asylum seekers must wait two months in Italy, three months in Austria and Germany, six months in Denmark and nine months in France. While Sweden does not have an initial waiting period, access to the labor market is used as an incentive to make asylum seekers cooperate in the application procedure. Before asylum seekers can work in Sweden, they are supposed to provide valid documents, or at least show that they are actively seeking to obtain them. Denmark, France, Italy and Sweden have no labor market tests in place. Austria and Germany require a test, but Germany exempts asylum seekers from the test if they have already waited 15 months, are highly skilled or eligible for occupations in high demand. In sum, labor market access calls for wise calibration of access criteria and accompanying measures, as well as adjustment to current processing times, but, in turn, makes it possible to ease integration following acceptance as a refugee.

Average duration of asylum procedure (to decision in first instance): refers to the time required to process an asylum seeker and either accept or reject his/her application. Shorter application processing times are better: refugees receive support more quickly, which is especially important in language learning. Denmark has an administration that is able to process asylum requests in only 2.5 months, compared to Germany's 5.3 months. Germany does now helpfully provide an ID card to asylum seekers, which allows different organizations to access their information (OECD 2016b), an idea that other countries may find beneficial to adopt. Germany has also established fast tracking processes for asylum seekers with particularly high and low probabilities of taking a positive decision that improve average processing times for these groups.

Conclusion

The current influx of refugees challenges European institutions and their ability to integrate new arrivals. It becomes increasingly important to better understand what this persistent inflow of asylum seekers will mean for Europe, its economy and the living standards of its native population in both the short and the medium term. As shown by Battisti et al. (2014), final welfare outcomes depend not only on the skill levels of immigrants and the native population, but also on search frictions and unemployment insurance levels.

The finding of potential positive effects is in line with IMF predictions: Aiyar et al. (2016) emphasize that, in the medium term, the effect of the refugee surge will depend on policies that facilitate the integration of refugees into the labor market. Drawing on the OECD proposals discussed in this report can hence be an important first step towards ensuring the successful integration of immigrants and mid-term economic growth.

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THE DEVELOPMENT OF TAX TRANSPARENCY IN OECD COUNTRIES

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Over the course of globalisation, governments have been confronted with the growing international dimension of financial transactions as taxpayers' activities have turned increasingly global, and now include cross-border investments and establishments, as well as personal and capital movements. In order to prevent tax evasion, different jurisdictions need to cooperate to ensure the full and proper application of their domestic tax laws. One of the most prominent ways to do this is through the exchange of information on taxation. This report aims to explain why we need tax cooperation, how the OECD countries and the EU in particular have taken action in order to increase global tax transparency, and to what extent legislative measures have been implemented effectively.

As far as cross-border taxation is concerned, jurisdictions find themselves faced with two opposing principles: the territoriality principle and the universality principle, eventually creating a tax enforcement and assessment gap. Generally, all jurisdictions are subject to the formal territoriality principle: investigation meas-

ures and other enquiries or determination procedures are forbidden on foreign sovereign territory. The substantial territoriality principle (source principle) would accordingly prohibit linking legal consequences according to national law to foreign issues. However, for taxation matters this has been almost completely replaced by the universality principle (world income principle), which requires the state to take legal action irrespective of the nationality and location of the subject. Thus, jurisdictions are faced with a disparity between the university principle and formal enforcement possibilities, which they try to close through intergovernmental agreements and the exchange of information on tax matters.

Fundamental types of tax exchange of information

In order to properly understand international movements towards tax transparency, it is essential to differentiate between three fundamental types of tax exchange of information.

Information exchange on request

Information exchange on request is a situation in which one authority asks another for particular information on a specific tax case. In the following, the requested authority transmits the requested information. This represents a passive exchange of information because the requesting state has no control or influence over the actions of the requested state.

Table 1

Intended timelines for first automatic exchanges*

Jurisdictions undertaking first exchanges by 2017 (54)

Anguilla, Argentina, Barbados, Belgium, Bermuda, British Virgin Islands, Bulgaria, Cayman Islands, Colombia, Croatia, Curaçao, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Guernsey, Hungary, Iceland, India, Ireland, Isle of Man, Italy, Jersey, Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, Montserrat, Netherlands, Niue, Norway, Poland, Portugal, Romania, San Marino, Seychelles, Slovak Republic, Slovenia, South Africa, Spain, Sweden, Trinidad and Tobago, Turks and Caicos Islands, United Kingdom

Jurisdictions undertaking first exchanges by 2018 (47)

Albania, Andorra, Antigua and Barbuda, Aruba, Australia, Austria, The Bahamas, Bahrain, Belize, Brazil, Brunei Darussalam, Canada, Chile, China, Cook Islands, Costa Rica, Dominica, Ghana, Grenada, Hong Kong (China), Indonesia, Israel, Japan, Kuwait, Lebanon, Marshall Islands, Macao (China), Malaysia, Mauritius, Monaco, Nauru, New Zealand, Panama, Qatar, Russia, Saint Kitts and Nevis, Samoa, Saint Lucia, Saint Vincent and the Grenadines, Saudi Arabia, Singapore, Sint Maarten, Switzerland, Turkey, United Arab Emirates, Uruguay, Vanuatu

* The United States has indicated that it is undertaking automatic information exchanges pursuant to FATCA from 2015 and has entered into intergovernmental agreements (IGAs) with other jurisdictions to do so. The Model 1A IGAs entered into by the United States acknowledge the need for the United States to achieve equivalent levels of reciprocal automatic information exchange with partner jurisdictions. They also include a political commitment to pursue the adoption of regulations and to advocate and support relevant legislation to achieve such equivalent levels of reciprocal automatic exchange.

Source: OECD (2016a).

¹ Ifo Institute (both).

Table 2

Development of Art. 26 OECD MTC OECD-information Clause Model Type Not only in conducting the DTT, but limited on residents of Art. 26 OECD MTC 1963 = limited major clause the state parties and such tax types are mentioned in the DTT Art. 26 OECD MTC 1977 = limited major clause Omission of the requirement of state party residency Art. 26 OECD MTC 2000 = unlimited major clause Enlargement on all types of taxes of the state parties Examination by the requested state does Art. 26 OECD MTC 2005 = unlimited major clause without a not depend neither on its own public tax interests nor on a restriction by bank secrets national bank secret Provided such use is allowed under the laws of both states and the competent authority of the Art. 26 OECD MTC 2012 = use information received for tax purposes and for non-tax purposes supplying state authorizes such use

Source: European Parliament (2015).

The information exchange on request is subject to three OECD principles (OECD 2015). Firstly, the requested state has to do everything in its power in order to assist the requesting state. Secondly, the subsidiary principle requires the requesting state to use its investigating powers to their full extent before submitting the request. Finally, the information requested has to be relevant to the enforcement of the domestic laws of the relevant state.

Spontaneous exchange of information

Spontaneous exchange of information is the provision of information in a singular case to another state that is foreseeably relevant to that other party and has not previously been requested. In this, it is a very effective tool to counter tax evasion since it transmits information on taxation that the other state could hardly have detected autonomously.

Automatic exchange of information

The automatic exchange of information focuses on the systematic communication of predefined cases without a concrete suspicion of violation of tax law or tax losses. The exact content and extent of automatic exchange is subject to the jurisdictions' negotiations. As can be seen from Table 1, the automatic exchange of information is increasingly being implemented and thus becoming the norm.²

Legal basis for information exchanges on tax matters

Information clauses modelled on Art. 26 OECD Model Tax Convention

Many countries signed a wide series of Double Tax Treaties, of which Art. 26 of the OECD's Model Tax Convention (MTC) forms the basis. With Art. 26, the residence requirement disappeared as a requirement for personal tax circumstances. This standard provides the classical mutual assistance for information exchange on request and for spontaneous information exchange in single examined cases. The automatic exchange of information requires further negotiations between the parties in order to define the scope of the information to be transmitted.

As shown in Table 2 on the development of Art. 26 OECD MTC, until its amendment in 2000, Art. 26 was restricted to resident taxpayers for a limited range of taxes. Since 2000, all taxes except social security contributions have formed part of DTTs. Since 2005, the OECD's standards have been an unlimited major clause without any restriction of bank secrets. Thus, there is a distinction between the protection of banking secrecy and of commercial secrets. Whilst commercial secrets are seen as essential for a competitive market, banking secrecy often helps a state to retain local advantages based on taxation rules. In 2012, Art. 26 was again amended to allow for the use of information retrieved for tax purposes also for non-tax purposes.

Since 2002, many OECD countries have implemented Tax Information Exchange Agreements (TIEAs) with tax havens as identified by the OECD, basing

² Table 1 is also available in the DICE Database (DICE Database 2016b)

their TIEAs on the OECD Tax Information Exchange Agreement Model Convention (TIEA MC), which involves the exchange of fiscal information between OECD member states and tax havens. This model agreement is not a binding instrument, but can be seen instead as a base for bilateral and multilateral agreements. In this, the OECD model is an extension of available resources within informational exchange.

The primary focus of the OECD TIEA MC is the exchange of information on request, whereas spontaneous exchange and automatic exchange of information should be subject to individual negotiations. As far as the individual request disclosure is concerned, the OECD TIEA MC conforms with Art. 26 of the OECD MTC. In addition, the OECD TIEA MC allows tax audits and deals with withholding tax information. Similar clauses and limits on the exchange of information are specified as in the OECD MTC. The OECD TIEA MC concerns direct taxes, capital and wealth taxes, real estate taxes and inheritance or gift taxes.

Information exchanges between EU countries based on EU-Law

Mutual assistance between EU member states in direct taxation matters has predominantly been regulated by Art.26 OECD MTC, which has been incorporated in many of the EU's tax directives.

In 1977, facing the challenges to taxation caused by increasing European integration and internationalisation of economic processes, the EU passed the EC Mutual Assistance Directive. This, however, did not provide for a mandatory automatic exchange of information. Thus, in 2003 the Savings Directive was passed with the aim of making savings income accumulated in the form of interest payments by beneficial owners in one EU country who are fiscally resident in another EU country subject to effective taxation. The Savings Directive essentially sets a minimum amount of information to be reported by the paying agent to the competent authority of its member state of establishment. To date, Austria is the only EU member state still refusing to participate in the automatic exchange of information.

In 2011, the EU Directive on Administrative Cooperation (DAC1) was passed, widening the scope, instruments and speed of the information exchange as specified by the Savings Directive. Its aim was to strengthen the cooperation between EU tax authorities by setting a minimum standard for intergovernmental cooperation in tax matters.

DAC1 was replaced by DAC2 in 2014, when the EU responded to the international development of information on financial accounts, in particular to the US Foreign Account Compliance Act and the OECD "Standard for Automatic Exchange of Financial Account Taxation Matters". The EU widened the automatic exchange of information to an automatic exchange of financial account information standard. By doing so, it increased the range of application of the automatic exchange of information to include income from securities, from the sale, refund or redemption of the debt claims and benefits from life insurance contracts. In addition, DAC2 unified the common reporting standard between EU member states.

Information exchanges on a multilateral legal basis

The Joint Council of Europe / OECD Convention on Mutual Administrative Assistance in Tax Matters was passed in 1988 and amended in 2010 and 2014. It forms the main legal basis for information exchanges between the EU member states and third countries. Simplifying the information exchange to a common standard, it aims to enable each party to counter international tax evasion, to enforce its national laws in a better way whilst, at the same time, respecting taxpayers' rights. In contrast to DAC1 and 2, it covers all forms of compulsory payments to governments, including social security payments. It also applies to countries not part of the DAC1 and 2 such as Australia, Canada, Japan and the United States.

In the 2010 amendment, the Joint Convention was opened up to non-EU and non-OECD countries and bank secrecy could be overcome in order to gain tax transparency. In 2014, further common standards for Automatic Exchange of Financial Information (AEFI) were introduced and additional states were forced to follow them.

Concurrences of the legal bases

As far as international taxation is concerned, the variety of legal sources might form concurrences. The question to be asked is in what hierarchical order they apply. In the EU, national laws based on EU Directives are superior to Double Tax Treaties, Tax Information Exchange Agreements and multilateral conventions. Thus, EU member states are bound by DAC as implemented in national laws. In this, DAC acts as a minimum standard where DTT information clauses, TIEAs and multilateral conventions only apply when their scope extends the EU Directive. As a result, they are almost only relevant in relation to third countries, i.e. to non-EU member states.

Table 3

Development of Art. 26 OECD MTC Jurisdiction ratings following a Phase 2 review Australia, Belgium, Canada, China (People's Republic of), Colombia, Denmark, Finland, France, Iceland, India, Ireland, Isle of Man, Japan, Korea, Lithuania, Mexico, New Zealand, Norway, Slovenia, South Africa, Compliant Albania, Argentina, Aruba, Austria, Bahamas, Bahrain, Belize, Bermuda, Botswana, Brazil, British Virgin Islands, Cameroon, Cayman Islands, Chile, Cook Islands, Cyprus, Czech Republic, El Salvador, Estonia, Former Yugoslav Republic of Macedonia, Gabon, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guernsey, Hong Kong (China), Hungary, Italy, Jamaica, Jersey, Kenya, Latvia, Liechtenstein, Luxembourg, Macao (China), Malaysia, Malta, Mauritania, Mauritius, Monaco, Montserrat, Netherlands, Nigeria, Niue, Pakistan, Philippines, Poland, Portugal, Qatar, Russia, San Marino, Senegal, Singapore, Slovak Republic, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Saudi Arabia, Seychelles, Switzerland, Largely compliant Turks and Caicos Islands, United Kingdom, United States, Uruguay Andorra, Anguilla, Antigua and Barbuda, Barbados*, Costa Rica, Curação, Indonesia, Israel*, Samoa, Sint Partially Maarten, Turkey, United Arab Emirates compliant Jurisdictions not yet rated because they cannot move to Phase 2

Federated States of Micronesia, Guatemala, Kazakhstan, Lebanon*, Nauru*, Trinidad and Tobago, Vanuatu*

Source: OECD (2016b).

Comparing implementation of information exchange standards in the OECD

In order to ensure growing implementation, as well as the quality of exchange of information agreements amongst OECD countries, the Global Forum on Transparency and Exchange of Information for Tax Purposes was established. Comprising almost 100 jurisdictions, it is a multilateral framework dedicated at ensuring and implementing tax transparency and the exchange of information on tax standards. In this regard, it has set up international standards (see OECD MTC and OECD TIEA MC) and conducts peer reviews.

The peer reviews break down the international OECD standards into ten points covering the availability of information, the access of information and the exchange of information. For a more detailed list of the ten points, please refer to the DICE table on "Compliance with International Exchange of Information Standards" (DICE Database 2016a). The OECD's peer reviews are structured into two-phases: in phase one, the jurisdiction's legal and regulatory framework is assessed against the ten elements. Only if there is a positive assessment result, a country will move to phase two where the application of the international standards in practice is assessed. In the DICE table on "Compliance with International Exchange of Information Standards" (DICE Database 2016a), we can see the results of the peer reviews for 2016. From Table 3 it is clear that all EU countries comply or largely comply with the OECD

international standards, whilst many of the developing countries still struggle to implement tax transparency.

The OECD report "Tax Transparency 2015" shows that international movements towards greater tax transparency are making progress. All jurisdictions rated as non-compliant in 2014 improved in 2015, pointing to a positive overall trend towards the exchange of information on tax matters until 2017. In addition, since the new standard for automatic exchange of information was published in 2011, a large increase has been seen in the number of taxpayers reporting the existence of foreign financial accounts, with figures rising from 1.2 million in 2011 to 1.8 million in 2014, thus implying that the implementation of the automatic exchange of information on fighting tax evasion has had a positive impact.

Legal protection of taxpayers

A central risk that comes with exchanging information on tax matters is that of data privacy and of the legal rights of citizens. In the EU, exchange of information is subject to legal protection rights. Information exchange of personal data has to be based on Parliamentary Law and justified by a clearly defined public purpose. The amount of personal data retrieved has to be in relation to the goal of information exchange, with limitations on the collection and processing of personal data for tax goals. Table 4 shows details of the rights that apply to the exchange of information in order to protect taxpayers.

^{*} The jurisdiction is undergoing a supplementary review.

Table 4

EU legal protection of taxpayers						
Instruments	Content					
Notification right	Tax authority or financial intermediaries have to inform the taxpayer before transmitting his/her data to the foreign tax authority					
Hearing right	Right of the taxpayer to be heard before transmitting his/her data to the foreign tax authority					
Right of filing an objection	Right of the taxpayer to intervene against the transmittance of his/her data in front of a court of his/her home state					
Preliminary injunction right	Right to get preliminary legal protection by an interim suspension					
Right of damage compensation	As a last resort: at least financial compensation					

Source: European Parliament (2015).

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THE EFFECT OF PRESUMED CONSENT DEFAULTS ON ORGAN DONATION

JESSICA LI AND TILL NIKOLKA¹

Opt-in versus opt-out consent systems

Many developed countries face a chronic shortage of human organs for transplantation and are struggling to meet growing demand for organs. From 1995 to 2005, the number of patients placed on waiting lists for organ transplants grew on average at a rate of four percent per year. Growing waiting times jeopardize patients' health; for example, the median waiting time in the US for a kidney transplant is over three years, and median waiting times for hearts and livers are seven months and two years respectively (Howard 2007). The chronic shortage of organs has incited debate over policy design to increase approval for donations among donors, and thus improve the availability of organs for transplantation.

In this context, a widely discussed policy measure concerns the legislative default for cadaveric organ donation. In many countries, health authorities are considering the benefits of an opt-out compared with an opt-in consent system for deceased organ donation. Countries with opt-in systems, such as the US, the UK and Germany, procure organs from deceased donors under the informed consent principle. By law, potential donors must give express consent in order to enter the donor pool, which is often reflected on a donor registration card or a driver's license. On the other hand, an optout system reflects a presumed consent policy; deceased individuals, in theory, are automatically classified as potential donors unless they had explicitly "opted out" of donation. Individuals who do not wish to potentially donate after death must actively express their opposition, for example, by filling out a form. Examples of countries with opt-out policies include Austria, France and Norway. As Abadie and Gay (2006) note, the specific content and enforcement of laws vary greatly among countries with opt-out policies. For instance, in Austria presumed consent legislation is applied strictly, and the fact that the deceased individual did not opt out ultimately determines that the individual is registered

Arguments in favor of opt-out consent regulation

In the behavioral economics literature, changing to a presumed consent regime is expected to increase the number of registered donors by influencing attitudes and behavior. First, "opt-out consent systems are likely to bridge the gap between people's intentions and their behavior by removing the need to undertake any actions in order to become an organ donor" (Shepherd, O'Carroll and Ferguson 2014). Results from a US 1993 Gallup survey support the theory that the need for deliberate, physical effort is a barrier between people's preferences and registration: although 85 percent of Americans favor organ donation and 69 percent would like to donate their organs after death, in practice only 28 percent actually become donors in registries (Gallup 1993). Second, individuals take the default as a suggestion by policymakers and are more likely to act according to what they view as the recommendation (Johnson and Goldstein 2003; McKenzie, Liersch and Finkelstein 2006). Finally, according to the concept of loss aversion, people gravitate toward the status quo because the losses weigh more heavily psychologically than the equivalent gains in a change; thus people in opt-out countries are less likely to deviate from the default. In essence, presumed consent laws could increase deceased donation rates because opt-out systems influence people's attitudes, decision-making behavior, and consent decisions in favor of deceased organ donation.

Basic descriptive statistics for a sample of OECD countries suggest that countries with opt-out policies do indeed tend to have more deceased donors per million of the population (pmp) than countries with opt-in policies. Table 1 shows donation and transplantation rates for the OECD countries in 2014, excluding countries with populations smaller than two million.² The mean number of actual deceased donors pmp in 2014 was 19.46

as a donor, overriding family approval. However, most countries with opt-out policies like Spain still consider the families' wishes in practice, and families are allowed to veto donation, even if the deceased individual previously revealed a preference for donation. Consent legislation on the national level is often complicated by the fact that laws also vary between state, provincial or local governments. Wales, for example, recently decided to change from opt-in to opt-out consent, while the rest of the UK still maintains an informed consent law.

¹ Ifo Institute (both).

 $^{^{2}\,}$ Table 1 is also available in the DICE Database (DICE Database 2016).

in opt-out countries versus 13.59 in opt-in countries, or approximately six percentage points more. Likewise, the average number of deceased organ transplantations pmp and the average share of deceased organ transplantations out of both living and deceased transplantations were comparatively higher in countries with presumed consent laws. Germany and Austria - which have different consent default systems, but are otherwise very similar with respect to cultural, social and institutional characteristics – provide an interesting comparison. While Germany, an opt-in country, had 10.45 actual deceased donors pmp in 2014, Austria, an opt-out country, had more than double at 24.94 deceased donors pmp. Finland and Denmark can be compared in a similar manner: as an opt-in country Denmark had 14.29 actual deceased donors pmp in comparison to Finland, which had 22.41 deceased donors pmp.

Causal evidence from empirical analysis?

On the other hand, living donation rates might be higher in informed consent countries, where deceased donation rates tend to be lower: in 2014 there were 16.03 living organ transplantations pmp on average in opt-in countries, versus 8.20 on average in opt-out countries. Abadie and Gay (2006) explain that "it seems likely that an increase in the supply of cadaveric organs would be followed by a reduction in the supply of organs from living donors" because of the substitution effect for applicable organ donations. The patterns revealed in descriptive statistics are consistent with results published in several empirical studies, such as Abadie and Gay (2006); Shepherd, O'Carroll and Ferguson (2014).

Moreover, countries substantially vary in their culture, religion, transplant infrastructure, and educational level – which are likely to influence a country's propensity toward donation regardless of its consent system, as well as the type of consent system a country adopts in the first place. Beyond legislative defaults, the empirical literature considers other variables that are hypothesized to affect organ donation rates to ensure that these variables do not interfere with results. The most common variables include the road traffic accident mortality rate, GDP, the number of hospital beds per 10,000 people, the percentage of the population that identifies as Catholic, and whether the country is more likely to use civil or common law. GDP is positively associated with deceased organ donation rates because transplantation occurs primarily in wealthy countries and requires expensive infrastructure to support it (Horvat et al. 2010). Previous research has found that presumed consent countries tend to be predominantly Catholic, while informed consent laws are more likely to occur in countries with a legislative system based on common law like the United States or Britain (Abadie and Gay 2006). Many studies also use the number of hospital beds as a proxy for quality and abundance of healthcare. Finally, countries with higher rates of vehicle accidents may be more likely to have a larger supply of donor organs (Shepherd, O'Carroll and Ferguson 2014). Even after controlling for these covariates, most studies still find higher deceased donation rates in opt-out countries. The 2006 study by Abadie and Gay, which examines donation rates for 22 countries over ten years, finds that presumed consent countries have roughly 25 percent to 30 percent higher donation rates than informed consent countries.

Healy (2006) uses a time series of 16 OECD countries to investigate variation in procurement rates. While he finds similar results as Abadie and Gay (2006), Healy (2006) does not interpret the results as causal. Instead, Healy argues that countries with opt-out regimes also invest more effectively in the organization and logistics of the procurement and transplant systems. For example, in the early 1990s Spain created a network of highly trained transplant coordinator teams and implemented them in donor hospitals. Teams are also responsible for donor detection and recruitment efforts. Spain subsequently saw striking growth in donation rates throughout the 1990s (and in Table 1, Spain remains at the top in terms of number of deceased donors pmp and number of deceased organ transplantations pmp as of 2014). What is notable is that, in practice, Spanish hospitals still ultimately defer to the families' wishes, suggesting that hospital teams are key to successful recruitment and procurement. Healy concludes that opt-out countries are more likely to pay attention to "more fine-grained organizational differences" - like "better training, clear delegation of responsibility, a strong presence in hospitals" - and that these factors, rather than presumed consent legislation, are responsible for higher rates. Additionally, Healy conjectures that countries that adopt presumed consent laws are probably more favorably disposed toward organ donation before these laws are even established.

Unlike Healy, most researchers find that consent type does play some causal role – however, "as part of a causal change rather than a single causal factor" (Shepherd, O'Carroll and Ferguson 2014). Bilgel (2012) examines the interactions between a presumed consent legal re-

gime and other customs and institutions in 24 countries over a 14-year period. Bilgel elaborates: "The evidence confirms that countries in which presumed consent is enacted produce substantially higher deceased donor rates. However, the magnitude of this impact highly depends on the involvement of the family and the establishment of donor administration systems [...]." The study advocates that hospitals still seek family consent, regardless of the preferences of the deceased individual, while maintaining a registry to document people's preferences; countries that do not seek family consent could face a public backlash that would encourage many individuals to deliberately register as non-donors. Countries also need to have in place certain customs and institutional settings, like proper medical infrastructure and efficient organizational systems, for opt-out legislation to be effective. In fact, the introduction of presumed consent legislation in France and Brazil had adverse effects because France and Brazil failed to build the necessary social support and organization of processes, perhaps damaging trust between doctors caring for patients at the end of life and their families (Bramhall 2011).

These other factors are probably responsible for variations and outliers in the data in Table 1: The US and UK, despite being opt-in regimes, had relatively high rates of 26.65 and 20.61 deceased donors pmp in 2014 respectively; in these wealthier, aging countries demand for organ transplants is greater, and both countries have better infrastructure and organizational systems to supply donor organs and transplantations. By contrast, there are opt-out countries like Chile, Greece and Turkey that had relatively low numbers of deceased donors in 2014, perhaps due to insufficient support and infrastructure, as well as cultures that disfavor and mistrust donation and transplantation activities.

Policy implications

When deciding on the implementation of consent default legislation, policymakers have to consider that results of observational studies using macro data do not necessarily imply that opt-out legislation is the single, "silver bullet" cause of increased donation rates. In the light of theoretical considerations and the empirical evidence presented above, supporters of presumed consent systems argue that switching to a presumed consent system could increase the supply of donated organs cost-effectively. It could be a solution that is more politically feasible than other methods, like introducing financial

incentives for organ donor registrants or their families, by offering payment to living donors; or prioritizing assignment of organs to donor registrants (a policy referred to by Schwindt and Vining as "the mutual insurance pool") (Cohen 1989; Hansmann 1989; Schwindt and Vining 1998; Howard 2007). The fact that legislative defaults would not involve financial gain or incentivize an individual to register against personal, moral, or religious beliefs means that an opt-out rule could be more ethical. Additionally, in countries where most people are in favor of organ donation and would prefer to donate as indicated by survey results, such as the US, then changing to an opt-out system would align with more people's preferences, while removing the costs of opting out for them. Thus presumed consent legislation could help solve shortages in donated organs, with the social benefits outweighing the costs.

Potential drawbacks to an opt-out default also arise. Some individuals who do not wish to register as donors would not have the awareness or information to opt-out; Johnson and Goldstein's (2003, 2004) articles account for errors in which individuals who do not intend to donate are incorrectly categorized as donors. Assuming that people's preferences toward organ donation are fluid rather than fixed, as Johnson and Goldstein do, whether or not it is ethical to use policy defaults to shape people's attitudes, behavior and choices is questionable. There could also be difficulties in enforcing opt-out legislation consistently within a country due to legal, political or cultural differences between states or provinces.

Countries should consider the adoption of a presumed consent law as a possible way to alleviate organ shortages. However, the potential effects of such a proposal are nuanced. Historical observations show that it is important to consider whether the necessary social conditions are in place, and any change in the consent default should occur in conjunction with other strategies like increasing transplant capacity or improving the ability to identify and recruit potential donors in order to be effective.

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Table 1

Organ donation and transplantation rates, 2014

				J				
	Opt-in or opt-out	Actual deceased donors (pmp) do	Number of deceased organ transplantations (pmp) ^{d)}	Number of living organ transplantations (pmp) d)	Number of total organ transplantations (pmp) ^d	Living kidney transplants (pmp)	Living liver transplants (pmp)	Deceased organ transplantations out of total
Austria	Opt-out a)	24.94	86.35	90.6	95.41	8.35	0.71	90.5%
Belgium	Opt-out a)	26.94	75.22	9.64	84.86	6.04	3.60	%9.88
Czech Republic	Opt-out a)	24.39	72.14	80.9	78.22	5.89	0.19	92.2%
Denmark	Opt-in ^{a)}	14.29	44.10	19.64	63.75	19.64		69.2%
Finland	Opt-out a)	22.41	63.33	2.78	66.11	2.78		%8'56
France	Opt-out a)	25.93	74.98	8.15	83.13	7.96	0.19	90.2%
Germany	Opt-in ^{a)}	10.45	38.37	8.20	46.57	7.50	0.70	82.4%
Greece	Opt-out a)	4.50	11.63	3.78	15.41	3.78		75.5%
Hungary	Opt-out a)	20.51	49.29	4.65	53.94	4.65		91.4%
Ireland	Opt-in ^{a)}	13.40	44.89	8.51	53.40	8.51		84.1%
Italy	Opt-out a)	22.65	49.82	4.37	54.19	4.11	0.26	91.9%
Latvia	Opt-out a)	14.50	27.00	3.50	30.50	3.50		88.5%
Netherlands	Opt-in ^{a)}	16.79	48.15	31.97	80.12	31.79	0.18	60.1%
Poland	Opt-out a)	15.55	40.89	2.23	43.12	1.44	0.79	94.8%
Portugal	Opt-out a)	27.26	64.16	5.56	69.72	5.09	0.47	92.0%
Slovak Republic	Opt-out a)	11.64	27.27	2.73	30.00	2.73		%6.06
Slovenia	Opt-out b)	20.95	56.67		56.67			100.0%
Spain	Opt-out a)	35.71	83.14	9.43	92.57	86.8	0.45	%8.68
Sweden	Opt-out a)	17.29	66.45	16.36	82.81	15.73	0.63	80.2%
United Kingdom	Opt-in ^{a)}	20.61	57.46	17.78	75.24	17.28	0.50	76.4%
Norway	Opt-out b)	22.75	79.22	13.33	92.55	13.33		85.6%
Switzerland	Opt-in c	14.27	47.80	15.00	62.80	14.63	0.37	76.1%
Turkey	Opt-out b)	5.37	14.24	42.09	56.33	30.32	11.77	25.3%
Australia	Opt-in ^{a)}	16.02	49.37	11.35	60.72	11.31	0.04	81.3%
Canada	Opt-in a)	16.65	50.31	15.24	65.55	12.73	2.51	76.8%
Chile	Opt-out b)	6.91	19.83	3.82	23.65	3.31	0.51	83.8%
Japan	Opt-in a)	0.61	2.36	14.87	17.23	11.58	3.29	13.7%
Mexico	Opt-in ^{a)}	3.36	7.48	15.09	22.57	15.04	0.05	33.1%
New Zealand	Opt-in a)	10.00	30.43	16.74	47.17	15.65	1.09	64.5%
United States	Opt-in ^{a)}	26.65	75.83	17.99	93.82	17.16	0.83	%8'08
Opt-in mean (pmp)		13.59	41.38	16.03	57.41			%2'99
Opt-out mean (pmp)		19.46	53.42	8.20	61.62			%0.98
Opt-in median		14.28	46.35	15.17	61.76			
Opt-out median		21.68	00.09	5.11	61.39			

Empty cells: Data not available; pmp: "per million inhabitants"; Living transplantations include living kidney transplants and living liver transplants.

Sources: "Shepherd, O'Carroll and Ferguson (2014), http://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-014-01314#Sec14; "WHO (2014), http://www.who.int/bulletin/volumes/93/3/14-139535/en/? "The Guardian (2015). https://www.theguardian.com/society/2015/nov/25/organ-donation-wales-pioneers-opt-out "Global Observatory on Donation and Transplantation (2014), http://www.transplantation.com/society/2015/nov/25/organ-donation-observatory.org/

93

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NEW AT DICE DATABASE

Recent entries to the DICE Database

In the fourth quarter of 2016, the DICE Database received a number of new entries, consisting partly of updates and partly of new topics. Some topics are mentioned below.

- Early retirement conditions in the EU
- The determinants of collective bargaining coverage
- · Public reporting in health care
- Characteristics of Voluntary Health Insurance (VHI)
- Policies with regard to hospitals in rural or remote areas
- · Airlines: Sector regulation
- Privatisation of main airports
- Regional air agreements
- · Migrant remittances
- Application of systemic risk buffers across banking union countries
- Compliance with international exchange of information standards
- Maternity, paternity and parental leave entitlements and payment rates

The interactive graphics application Visual Storytelling has been further expanded.

FORTHCOMING CONFERENCES

EGIT – Economic Geography and International Trade Research Meeting

24-25 February 2017, Munich

Researchers, who are specialised in regional/urban economics and international trade, come together in order to share their ideas and comment on other's research papers. The meeting encourages interaction and discussion between the researchers, so that new ideas and joint projects can be initiated. Any theoretical or empirical paper, discussing the topics of economic geography or international trade, is welcomed. This includes topics in urban economics, regional economics, new economic geography, international trade, international migration, foreign direct investment, and the economics of multinational firms.

Scientific organisers: Prof. Dr. Gabriel J. Felbermayr, Prof. Dr. Volker Nitsch, Prof. Dr. Jens Suedekum

CESifo Area Conference on Applied Microeconomics

17-18 March 2017, Munich

The purpose of the conference is to bring together CESifo members to present and discuss their ongoing research, and to stimulate interaction and co-operation between them. All CESifo research network members are invited to submit their papers, which may deal with any topic within the broad domain of Applied Microeconomics (industrial organisation, experimental and behavioural economics, market regulation, banking and finance, auctions). The keynote lecture will be delivered by Ariel Pakes (Harvard University).

Scientific organiser: Prof. Christian Gollier, Ph.D.

7th Ifo Dresden Workshop on Labour Economics and Social Policy

23-24 March 2017, Dresden

The workshop aims to facilitate the networking of young scientists and to promote the exchange of their latest research across the range of labour economics, social policy, education economics, demography and migration. Policy relevant contributions, either theoretical or applied, are highly welcome. PhD students are particularly encouraged to submit their latest research.

Scientific organiser: Michael Weber

New Books on Institutions

The Political Economy of European Banking Union

David Howarth and Lucia Quaglia Oxford University Press, 2016

The Comparative Politics of Education

Teachers Unions and Education Systems around the World

Edited by Terry Moe and Susanne Wiborg Cambridge University Press, 2016

The Local in Governance

Politics, Decentralization, and Environment Satyajit Singh Oxford University Press, 2016