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# The Cost of Non-Schengen: Civil Liberties, Justice and Home Affairs aspects

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Cost of Non-Europe  
Report

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STUDY

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EPRS | European Parliamentary Research Service

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PE 581.387 - September 2016







# **The Cost of Non-Schengen: Civil Liberties, Justice and Home Affairs aspects**

## **Study**

At their meeting of 2 February 2016 the coordinators of the European Parliament's Committee on Civil Liberties, Justice and Home Affairs (LIBE) requested the Policy Department for Citizens' Rights and Constitutional Affairs to conduct 'An analysis of the Schengen area in the wake of the recent developments'.<sup>1</sup>

In addition, the European Parliamentary Research Service (EPRS) was requested to provide a specific analysis of the potential costs of re-introducing internal border controls - or of the 'Cost of non-Schengen' on the areas of Civil Liberties, Justice and Home Affairs - in coordination with the Policy Department.

In response to that request, this Cost of Non-Europe Report has been drawn up by the European Added Value Unit of the Directorate for Impact Assessment and European Added Value within DG EPRS. The aim of this study is to identify the costs of the (temporary) re-introduction of border controls between the Schengen Member States in economic, social and political terms and the potential benefits of more concerted action at European level, compared to the lack of such action or action by Member States alone, focusing on civil liberties, justice and home affairs.

This assessment builds on expert research commissioned specifically for the purpose from RAND Europe in the form of a Research Paper entitled 'The Cost of Non-Schengen: Civil Liberties, Justice and Home Affairs Aspects'. This Research Paper is found in the Annex to this report.

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<sup>1</sup> Centre for European Policy Studies (CEPS), 'An Analysis of the Schengen Area in the wake of recent developments', [Research paper](#) for Policy Department C: Citizens' Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs, DG IPOL, European Parliament, 2016, PE 571356

## **Abstract**

The Schengen Area is one of the major achievements of European integration as it facilitates the free movement of persons, goods and services which has brought significant benefits to the European economy and citizens. Yet, the recent unprecedented influx of refugees and migrants to Europe has exposed serious deficiencies in the common asylum, migration and external border control policies. These deficiencies, together with concerns related to internal security, have led several Schengen States to reintroduce internal border controls.

This study identifies the costs, of the (temporary) reintroduction of border controls between the Schengen Member States, with a special focus on civil liberties, justice, and home affairs aspects.

Given the restricted data availability and methodological limitations, the economic, social and political costs of reintroducing border controls within the Schengen Area are hard to measure. Within this context, it is difficult to estimate with a sufficient degree of certainty an overall cost in this policy field. Based on the expert research, however, this study estimates that - depending on their scope and length - the costs linked with the reintroduction of border controls could range between €0.05 billion and €20 billion in one-off costs and between €2 billion and €4 billion in annual operating costs. This amounts to around 0.02%-0.03 % of the Schengen area GDP.

As regards the offences investigated, the abolition of border controls in the light of Schengen has not led to higher crime rates, nor has the 2007 Schengen enlargement increased the perception of insecurity among EU citizens. On the contrary, citizens' trust in each other and towards public institutions seems to have increased. It is important to note that the abolition of border controls has been accompanied by measures to facilitate cross-border police and judicial cooperation, for instance adding to the number of illicit drug seizures. The societal benefits of this cooperation could be undone by a return to permanent border controls. Public trust in the EU seems to have been undermined, not by the existence of the Schengen Area, but rather by the failure of the European Union to effectively address the deficiencies exposed by the refugee crises.

This study recommends more concerted action at EU level with a view to returning to a fully functioning Schengen Area. Regaining inter-Member State and citizens' trust in the EU's ability to tackle the deficiencies exposed by the refugee crisis should be an immediate priority. More concerted action at EU level is necessary to foster solidarity and cooperation between Member State authorities. Their work should also be supported through EU agencies, such as the European Border and Coast Guard, Europol, Eurojust and the European Asylum Support Office. The need for changes to the current Schengen governance framework should be further considered based on compliance with the conditions allowing five Member States to maintain their internal border controls until November 2016.

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## Note on methodology

The notion of the 'Cost of non-Europe' was introduced by Michel Albert and James Ball in a 1983 report commissioned by the European Parliament. It was also a central element in a 1988 study carried out for the European Commission by the Italian economist Paolo Cecchini on the cost of non-Europe in the single market.

Cost of Non-Europe (CoNE) reports are designed to study the possibilities for gains and/or the realisation of a 'public good' through common action at EU level in specific policy areas and sectors. They attempt to identify areas that are expected to benefit most from deeper EU integration, where the EU's added value is potentially significant.

The specific aim of this Cost of Non-Europe report is to identify the root cause of gaps and barriers that have led to the reintroduction of internal border controls in the Schengen Area (without prejudice to the question as to whether these deficiencies justify the reintroduction of internal border controls). The costs of the reintroduction of those border controls were estimated in economic, social and political terms, focusing on civil liberties, justice and home affairs aspects. Where it was not possible to quantify all the costs and effects, a qualitative, complementary approach was used.

The economic impact of the reintroduction of border controls was estimated based on research that followed a bottom-up cost modelling approach comprising (i) the one-off fixed costs of setting up or reconstructing border crossing points and (ii) the operating, patrolling, administrative and maintenance costs of the day-to-day border controls. This approach was then applied to three potential scenarios affecting the scope and length of internal border controls. Estimates were based on extrapolating data from Finland, Switzerland and Latvia; however, this data covered the overall expenses related to border protection only, thus preventing a more detailed analysis.

The social impact of the (temporary) reintroduction of border controls was measured based on research looking at the impact of border controls on crime and security. There are, however, limitations to measuring this impact due to the lack of clear criminal definitions with comparable data among the Schengen States. Therefore a number of similarly-defined crimes were selected (acquisitive crimes, homicides, (hard) drugs). It is also important to bear in mind that this data only concerns reported crimes. As reporting of crimes differs between Schengen States, this report also draws on crime victimisation survey data.

The political impact was estimated based on research looking at changes in the public's trust in others, in politicians, in national parliaments and the European Parliament, in the police, or in the legal system, both in original Schengen countries, and those that acceded in 2008. A comparison was also made between border and non-border regions. Finally, this report recommends different EU policy options that could help overcome the identified gaps and barriers.

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Research Paper by RAND Europe on the Cost of non-Schengen from a Civil Liberties and Home Affairs Perspective

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## Executive summary

The Schengen Agreements are a central tool in enabling the free movement of people throughout the European continent, allowing them to move freely across borders of participating states. As such, the borderless Schengen Area gives a tangible reality to the four freedoms of the Single Market (free movement of people, goods, services and capital).

Schengen is clearly one of the major achievements of European integration. It is now a crucial part of the wider aim of the European Union to become an Area of Freedom, Security and Justice in which the free movement of persons is ensured in conjunction with appropriate measures with respect to external border controls, asylum, immigration and the prevention and combating of crime.

The recent unprecedented influx of refugees and migrants to Europe has, however, exposed serious deficiencies in the practical operation of the common asylum, migration and external border control policies, notably at the Greek (and hence EU) external border. As discussed in section 1 of this report, these deficiencies, together with related concerns as regards serious threats to internal security and public policy, notably posed by 'secondary movement of irregular migrants', have led a number of Schengen States to reintroduce internal border controls. They sought to justify this action in accordance with the relevant provisions of the Schengen Borders Code (SBC).<sup>2</sup>

Given the persistence of serious deficiencies in the management of the Greek external border, the Council adopted an implementing decision on 12 May 2016, based on a recommendation of the Commission, allowing five Schengen States (Austria, Denmark, Germany, Norway and Sweden) to maintain controls at certain parts of their internal borders for a further six months (until November 2016).<sup>3</sup>

As discussed in section 2 of this report, the Schengen State notifications point to a political climate in which there is a loss of trust in the ability of (other) States to effectively guard the external borders, process asylum applications and cooperate together in the fight against terrorism and other serious crimes. Initiatives to regain that trust were outlined by the Commission in the 'Back to Schengen Roadmap'<sup>4</sup>, the aim of which was to ensure the return to the normal functioning of the Schengen Area and to lift all internal border controls related to the migratory crisis by the end of 2016 at the

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<sup>2</sup> [Regulation \(EC\) 562/2006](#) of the European Parliament and of the Council establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code), as of 6 June 2016; Member States' [notifications](#) of the temporary reintroduction of border controls at internal borders.

<sup>3</sup> [Council Implementing Decision](#) setting out a Recommendation for temporary internal border control in exceptional circumstances putting the overall functioning of the Schengen area at risk.

<sup>4</sup> Communication from the Commission to the European Parliament, the European Council and the Council, Back to Schengen- A Roadmap, COM (2016) 120 of 4 March 2016.

latest. The Roadmap is based on the reinforcement of external border control, notably through the European Border and Coast Guard, a full application of EU asylum law by Greece, stepping up the implementation of the emergency relocation scheme<sup>5</sup> and the EU Turkey Joint Action Plan.<sup>6</sup> In calling for interoperability of data collection, exchange and analysis, the Commission also refers to evidence of terrorists having used routes of irregular migration.<sup>7</sup>

Against this background, section 3.1. of this report identifies the costs of the (temporary) reintroduction of border controls between the Schengen States, in economic, social and political terms, with a special focus on:

- (i) the one-off fixed costs of setting up or reconstructing border crossing points, and the operating, patrolling, administrative and maintenance costs of the day-to-day border controls,
- (ii) the impact of border controls on crime and security,
- (iii) changes in trust amongst the public : trust in others, in politicians, in national parliaments and in the European Parliament, in the police, or in the legal system.

As regards the economic impact, this report identifies three different scenarios:

1. A two-year 'suspension' of the Schengen area in the five countries that have currently reintroduced border controls related to irregular migration
2. A two-year 'suspension' of the Schengen Area and reintroduction of border controls in all Schengen countries at all internal borders
3. Indefinite suspension of the Schengen Agreement in all countries.

In Scenario 1 it is unlikely that border outposts would be reinstalled in full. Member States would also probably manage by reallocating human resources internally. They would have to purchase equipment to reflect the increasing number of travellers to be checked. The costs are estimated to be an amount of anything up to €211.5 million.

Scenario 2 is similar except for the fact that now all internal borders would be checked by all Schengen countries. The costs are estimated between €4.39 and €7.4 billion. The highest costs would be borne by Germany, whereas Greece, Iceland, Malta and Liechtenstein would be the least affected.

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<sup>5</sup> European Commission [Press release](#), Relocation and Resettlement: EU Member States urgently need to deliver, Strasbourg, 12 April 2016

<sup>6</sup>European Commission [Fact Sheet](#), EU-Turkey joint action plan, Brussels, 15 October 2015

<sup>7</sup> COM(2016) 205 final

Scenario 3 assumes a permanent reintroduction of border controls. In this case fixed costs related to the rebuilding and refurbishment of outposts are considered in full. Those costs would be less for those States which joined the Schengen area in 2007 or later as they often still have the basic infrastructure in place. The estimated costs of reintroducing border controls could be around €20 billion in one-off fixed costs and around €2 to €4 billion in annual operating costs. This corresponds to around 0.02%-0.03 % of GDP of the Schengen area.

Based on the research conducted, it may be concluded that the abolition of border controls within the Schengen Area, and the 2007 Schengen enlargement in particular, has not, for the offences investigated, led to higher crime rates. As discussed in section 3.2., acquisitive crime (burglary, robbery and car theft) rates have dropped both in the original and newly acceding Schengen States. The downward trend seems to be even stronger in border regions. At the same time, drugs seizures have increased in countries which entered Schengen after 2000. It is important to note that the abolition of border controls has been accompanied by measures to facilitate cross-border police and judicial cooperation, the success of which we might see reflected in these figures. Further research will be needed to confirm these trends for other offences as well as the link between (the absence of) border controls and crime rates. Also, as discussed in section 3.3., Schengen enlargement as such has not been found to have increased the perception of insecurity among EU citizens. On the contrary, citizens' trust in each other and in public institutions seems to have increased. Public trust in the EU, however, does appear to have been undermined, due to its failure to effectively address the refugee crises.

The study recommends more concerted action at EU level so as to ensure that the Schengen area can return to being fully operational. Regaining inter-Member State and EU citizens' trust in the EU's ability to tackle the deficiencies exposed by the refugee crisis should be an immediate priority. More concerted action at EU level is necessary to foster solidarity and cooperation between Member State authorities. Their work should also be supported through EU agencies, such as the European Border and Coast Guard, Europol, Eurojust and the European Asylum Support Office. The need for changes to the current Schengen governance framework should be further considered, based on the compliance with the conditions allowing five Member States to maintain their internal border controls until November 2016.

# 1. Introduction: background and current state of play

## 1.1. Background

The development of the Schengen Area dates back to 1985 when a group of five Member States (Belgium, France, Germany, Luxembourg and the Netherlands) signed the Schengen Agreement on the gradual abolition of checks at their common borders. Five years later, these five Member States signed a Convention implementing the Schengen Agreement. This Convention included measures regarding:

- removal of checks on persons at the internal borders;
- a common set of rules applying to people crossing the external borders of the EU Member States;
- harmonisation of the conditions of entry and the rules on visas for short stays;
- enhanced police cooperation (including rights of cross-border surveillance and hot pursuit);
- stronger judicial cooperation through a faster extradition system and enforcement of criminal judgments; and
- the establishment and development of the Schengen Information System (SIS) enabling national authorities to share and access information on people as well as on goods.<sup>8</sup>

Yet, the actual removal of border controls in the Schengen Area started only in 1995, when the Convention entered into force. In 1999, following the signing of the Treaty of Amsterdam, this intergovernmental agreement was incorporated into the EU framework.<sup>9</sup> Since then, the EU offers its citizens an area of freedom, security and justice without internal frontiers, in which the free movement of persons is ensured in conjunction with appropriate measures with respect to external border controls, asylum, immigration and the prevention and combating of crime.<sup>10</sup> Today, the Schengen Area is composed of 26 countries, of which 22 are EU Member States.

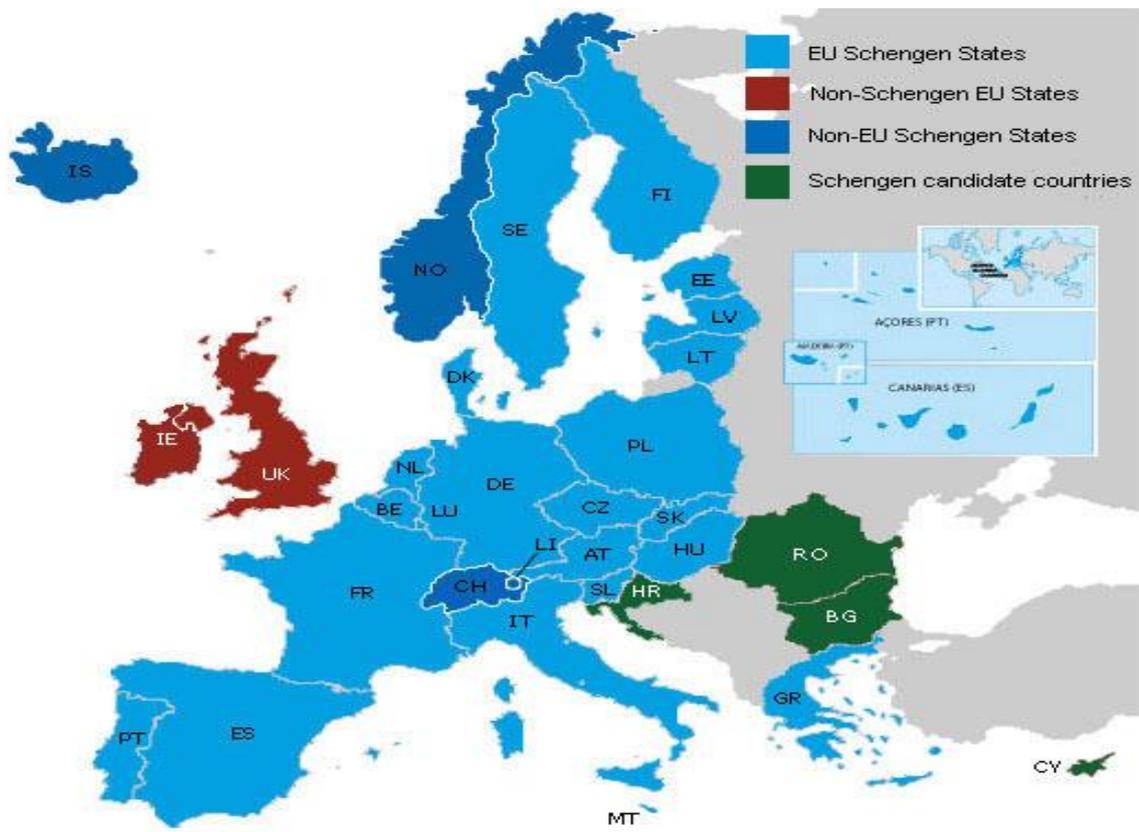
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<sup>8</sup> The Schengen *acquis* - Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders O. J. L 239, 22/09/2000 P. 0019 - 0062.

<sup>9</sup> TFEU, Protocol (No. 19) on the Schengen *acquis* integrated into the framework of the European Union.

<sup>10</sup> Article 3 (2) TEU; Article 67-89 TFEU.

Map: Schengen Area as of 1 July 2013



Source: European Commission, DG Migration and Home Affairs<sup>11</sup>

The Schengen Agreements are a central tool in enabling the free movement of people in Europe, across borders of participating states. As such, the borderless Schengen Area is key in delivering what is consistently regarded in opinion polls as one of the most positive results of the European Union in the eyes of Europeans.<sup>12</sup>

<sup>11</sup>[http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/schengen/index\\_en.htm#resp\\_map](http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/schengen/index_en.htm#resp_map)

<sup>12</sup> For instance, according to the last two Eurobarometer surveys: ‘the “free movement of people, goods and services within the EU” (57%, +2 percentage points) and “peace among the Member States of the EU” (55%, -1) remain by far the most positive results of the EU in the eyes of Europeans. Generally speaking, although the top two items – peace and free movement – have switched positions since autumn 2014, this hierarchy has remained very stable.’: Standard [Eurobarometer #83](#), spring 2015; ‘The “free movement of people, goods and services within the EU” (57%, +2 percentage points) and “peace among the Member States of the EU” (55%, -1) remain by far the most positive results of the EU in the eyes of Europeans. Generally speaking, although the top two items – peace and free movement – have switched positions since autumn 2014, this hierarchy has remained very stable.’, Standard [Eurobarometer #84](#), autumn 2015; European Parliament resolution of 10 September 2015 on migration and refugees in Europe, P8\_TA-PROV(2015)0317, paragraph 5: Reiterates its commitment to open borders within the

The 2006 Schengen Borders Code<sup>13</sup> codified most of the relevant Schengen rules concerning controls at external borders, removal of controls at internal Schengen borders - and their temporary reintroduction, and police cooperation in the zone behind the internal borders. In the aftermath of the ‘Arab Spring’ of 2011, the concerns about its impact upon the Schengen system, and the ability of Member States to control their share of external borders, as well as controversies concerning some Member States’ plans to reintroduce ‘quasi-border’ controls within their territory, led a number of Member States – in particular France and Italy – to demand greater freedom to reintroduce border controls at internal borders.<sup>14</sup> This led to the reform of the Schengen governance framework in 2013, which included amendments to the Schengen Borders Code (SBC) to provide for common rules on the temporary reintroduction of border controls at internal borders, and a new Schengen evaluation and monitoring mechanism to assess to what extent Member States apply the Schengen *acquis*.<sup>15</sup>

Specifically, Article 25 of the SBC sets out the general framework for the reintroduction by a Schengen Member State of border controls at internal borders where there is a ‘serious threat to public policy or internal security’. In such a case, the country may decide to reintroduce controls for up to six months, provided that the border controls represent a ‘last resort’ option and are temporary in nature.

Article 26 of the SBC specifies the criteria for the reintroduction of internal border controls. Notably, when a country takes the decision to reintroduce border controls it should consider the likely impact of ‘any threats to its public policy or internal security’ and the likely impact of the measure on the free movement of persons within the area without internal border controls. Article 27 of the SBC further describes the procedure for the reintroduction of temporary border controls and sets out the relevant notification requirements that the Schengen Member States should follow, including giving – other than in exceptional circumstances – at least four weeks’ notice period so that all relevant stakeholders<sup>16</sup> are informed. Article 28 of the SBC relates to situations that require

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Schengen area, while ensuring effective management of external borders; stresses that the free movement of people within the Schengen area has been one of the biggest achievements of European integration.’; European Parliament resolution of 12 April 2016 on the situation in the Mediterranean and the need for a holistic EU approach to migration, P8\_TA-PROV(2016)0102, para 75.

<sup>13</sup> [Regulation \(EC\) 562/2006](#) of the European Parliament and of the Council establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code).

<sup>14</sup> Peers, Steve. ‘[The future of the Schengen System](#)’, Swedish Institute for European Policy Studies, Report No. 6, November 2013.

<sup>15</sup> [Regulation \(EU\) No 1051/2013](#) of the European Parliament and of the Council amending Regulation (EC) No 562/2006 in order to provide for common rules on the temporary reintroduction of border control at internal borders in exceptional circumstances.

<sup>16</sup> e.g. other Schengen countries, the European Commission, the European Parliament, the European Council.

immediate action and provides for short-term (up to ten days, with possible extensions) introduction of internal border controls.

In addition, Article 29<sup>17</sup> includes a provision for situations where 'the overall functioning of the area without internal border control is put at risk as a result of persistent serious deficiencies relating to external border control' and allows the reintroduction of border controls for a period of up to two years (an initial six-month period, followed by six-month extensions up to three times). Importantly, unlike measures taken under Articles 25 or 28, reintroduction of border controls under Article 29 can take place based only on a recommendation from the Council of the EU, which itself should be based on a proposal from the Commission.

Finally, Article 30 lays down the criteria to be taken into consideration with respect to any border controls that have been reintroduced under Article 29.

The reform also changed the Schengen evaluation and monitoring mechanism from a completely intergovernmental system to one that is fully integrated in EU law and run primarily by the European Commission. Because the SBC had been substantially amended several times, a new consolidated version came into force in March 2016.<sup>18</sup>

## 1.2. Current state of play

The unprecedented influx of refugees and migrants to Europe, exceeding one million in 2015,<sup>19</sup> exposed the limits of European migration, border and asylum policies. The sheer

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<sup>17</sup> Following the agreement reached in a trilogue meeting regarding the Commission's proposal on the establishment of a European Border and Coast Guard Agency, Article 29 of the SBC will be slightly amended. The proposed amendment provides for a coordinated re-introduction of internal controls if the functioning of the Schengen Area is at risk due to the fact that a Member State does not ensure proper follow-up of a vulnerability assessment conducted by the agency or does not request sufficient support from the agency to respond to a specific and disproportionate pressure at its external borders - see position of the European Parliament at first reading on the proposal for a regulation of the European Parliament and of the Council on the European Border and Coast Guard, Article 78a; Amendment to Regulation (EU) 2016/399, article 29 (1); A. Gatto, [European Border and Coast Guard System](#), Briefing EU legislation in progress, EPRS, August 30, 2016.

<sup>18</sup> [Regulation \(EU\) No 399/2016](#) of the European Parliament and of the Council on a Union Code on the rules governing the movement of persons across borders (Schengen Borders Code) (codification); G. Malmersjo and M. Remáč, [Schengen and the management of the EU's external borders](#), Implementation appraisal, EPRS, European Parliament, April 2016

<sup>19</sup> The International Organisation for Migration (IOM) estimates that the number of arrivals into Europe in 2015 exceeded 1 million people – compared to 276 000 in 2014. As regards 2016, the number of arrivals in the period from 1 January to 31 May (205 509) is much larger than that over the same period in 2015 (91 860). IOM, '[Irregular Migrant, Refugee Arrivals in Europe Top One Million in 2015](#)'; IOM, 'Mediterranean Migrant Arrivals in 2016: 205 509; Deaths: 2 443: [New Tragedy Reported Off Crete Today](#)'.

numbers proved too much for the authorities, notably in Greece, to deal with in terms of managing its (and the EU's) external borders, providing adequate reception conditions, registering individuals in EURODAC and assessing their asylum claims.<sup>20</sup> This caused a *de facto* collapse of the Dublin system which requires that asylum seekers should stay in the first Member State through which they enter the EU and seek asylum there. An asylum seeker who travels on to another Member State should be returned to the first Member State of entry.<sup>21</sup> The European Court of Human Rights and the Court of Justice of the EU have ruled, however, that such transfers are not allowed if the reception conditions in the Member State of first entry amount to inhuman or degrading treatment.<sup>22</sup>

As a result, secondary movements of refugees and migrants occurred through the Western Balkans, Austria, Germany and other northern European countries. These mixed flows have prompted a series of Schengen Member States to invoke the relevant provisions of the Schengen Borders Code (Articles 25-30, discussed above) and reintroduce checks at their internal borders for a defined period of time.

Since September 2015, a total of eight countries of the Schengen area – namely, Austria, Belgium, Denmark, Germany, Hungary, Norway, Slovenia and Sweden – have reintroduced border controls in parts of their internal borders in view of a serious threat to internal security and public policy related to ‘secondary movements of irregular migrants’.<sup>23</sup> While Hungary and Slovenia – in response to the decline of the identified

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<sup>20</sup> Centre for European Policy Studies (CEPS), ‘An Analysis of the Schengen Area in the wake of recent developments’, Research paper for Policy Department C: Citizens’ Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs, DG IPOL, European Parliament, 2016, section 1.1.

<sup>21</sup> Regulation (EU) No 604/2013 of the European Parliament and of the Council of 26 June 2013 establishing the criteria and mechanisms for determining the Member State responsible for examining an application for international protection lodged in one of the Member States by a third-country national or a stateless person, OJ L 180, 29 June 2013, p. 31–59.

<sup>22</sup> ECtHR of 21 January 2011, Application no. 30696/09, *MSS v Belgium and Greece*; CJEU in Joined Cases *NS v Secretary of State for the Home Department*, Case C-411/10 and *M.E. and Others v Refugee Applications Commissioner, Minister for Justice and Law Reform*, C-493/10 [2011] ECR 13905; ECtHR of 4 November 2014, Application no. 29217/12, *Tarakhel v Switzerland*.

<sup>23</sup> In the same period, France and Malta also reintroduced internal border controls but for reasons not related to irregular migration. Specifically, France reintroduced internal border controls in November 2015 first in the context of the COP21 Conference and then as a consequence of the state of emergency following the Paris terrorist attacks of 13 November 2015. The internal border controls in France are currently still on-going. As regards Malta, internal border controls were reintroduced on 9 November 2015 in the context of the Commonwealth Heads of Government Meeting and the Valletta Conference on Migration, and were subsequently prolonged for reasons of a global terrorist threat and with the aim of dismantling a smuggling ring. Malta lifted the internal border controls on 31 December 2015. European Commission, COM (2016) 120 final, ‘[Back to Schengen – A roadmap](#)’, Communication of 4 March 2016 to the European Parliament, the European Council and the Council.

threats — did not prolong border controls after ten and thirty days respectively, the other countries have prolonged the controls on several occasions in accordance with the SBC.<sup>24</sup>

Crucially, on 2 February 2016, the Commission adopted a Schengen Evaluation Report on Greece, which found ‘serious deficiencies’ regarding Greece’s ability to manage its external borders, and on 12 February 2016, the Council issued 50 recommendations to Greece to remedy those deficiencies within three months.<sup>25</sup> Then, as part of its Communication on a Roadmap for restoring a fully functioning Schengen system, published on 4 March 2016, the Commission outlined steps to be taken, revolving mostly around improvements in Greece’s external border management, provision of assistance to Greece, full resumption of the Dublin system, and a coordinated approach to temporary border controls.

Two months later, on 4 May 2016, the Commission concluded that, despite the huge efforts of the Greek authorities and real progress on the ground, serious deficiencies in border management still persisted. It therefore proposed a prolongation of proportionate controls at certain internal Schengen borders in Austria, Denmark, Germany, Norway and Sweden for a maximum period of six months.<sup>26</sup> Following the Commission’s recommendation, the Council adopted an implementing decision on 12 May 2016 setting out a recommendation allowing for the continuation of temporary internal border control in exceptional circumstances for a further period of six months.<sup>27</sup> Specifically, following the Council’s recommendation, the five countries gave notice of the following internal border controls:<sup>28</sup>

- **Austria:** at the Austrian-Hungarian land border and Austrian-Slovenian land border (16 May – 12 November 2016);
- **Denmark:** in the Danish ports with ferry connections to Germany and at the Danish-German land border (1 June – 12 November 2016);
- **Germany:** at the German-Austrian land border (12 May – 12 November 2016);

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<sup>24</sup> Currently, five of the aforementioned countries have temporary border controls at their internal borders in place (Austria, Denmark, Germany, Norway and Sweden). Belgium did not prolong the temporary border controls after 22 April 2016.

<sup>25</sup> Council of the European Union, Interinstitutional File 0035/2016 NLE, ‘Council Implementing Decision setting out a [Recommendation](#) on addressing the serious deficiencies identified in the 2015 evaluation of the application of the Schengen *acquis* in the field of management of the external borders by Greece’.

<sup>26</sup> European Commission, [Press Release](#) of 4 May 2016, ‘Back to Schengen: Commission takes next steps towards lifting of temporary internal border controls’; proposal for a Council implementing decision setting out a recommendation for temporary internal border control in exceptional circumstances putting the overall functioning of the Schengen area at risk, COM(2016) 275 final.

<sup>27</sup> Council of the European Union, Interinstitutional File 0140/2016 NLE, ‘Council Implementing Decision setting out a [Recommendation](#) for temporary internal border control in exceptional circumstances putting the overall functioning of the Schengen area at risk’.

<sup>28</sup> European Commission, [‘Temporary Reintroduction of Border Control’](#).

- **Norway:** in the Norwegian ports with ferry connections to Denmark, Germany and Sweden (10 June-11 November 2016);<sup>29</sup>
- **Sweden:** in the Swedish harbours in the Police Region South and West and at the Öresund Bridge (8 June - 11 November 2016).

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<sup>29</sup><https://www.regjeringen.no/en/aktuelt/extension-of-internal-schengen-border-control-in-norway/id2503865/>

## 2. Gaps and barriers in the area of Justice and Home Affairs having led to the reintroduction of border controls

To justify the reintroduction of border controls, Member States have referred to the 'serious threat to public policy or internal security' in accordance with Article 25 of the Schengen Borders Code. In accordance with Article 27 of the Schengen Borders Code, Schengen States must provide exact details of the nature of the threat and its impact which is so substantial and immediate that it justifies the use of the exceptional border control measures. The consequences for EU citizens and their rights to free movement must be taken into account. This is necessary for the Commission and the Member States to assess the proportionality of the measure against the threat which the Member State has specified and justified under Article 26.<sup>30</sup>

It should be pointed out that 'migration and the crossing of external borders by a large number of third-country nationals should not, *per se*, be considered a threat to public or internal security'.<sup>31</sup> The Asylum Procedures Directive<sup>32</sup> requires Member States to process applications made at the borders. It has been argued that a reform of the Dublin system (rather than Schengen) and the reinforcement of the Common European Asylum System would provide more appropriate responses to the refugee crisis.<sup>33</sup>

Analysis of the notifications by Member States show that the reintroduction of border controls seems to be motivated by a lack of trust in the ability of the Italian and Greek authorities to manage their (and the Union's) external borders. They also point to a lack of preparedness among national authorities to deal with the influx of refugees and migrants. Some notifications are based on perceived future threats, including security threats.<sup>34</sup>

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<sup>30</sup> Centre for European Policy Studies (CEPS), *An Analysis of the Schengen Area in the wake of recent developments*, Research paper for Policy Department C: Citizens' Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs, DG IPOL, European Parliament, 2016, section 4.1.

<sup>31</sup> Schengen Borders Code, recital 26.

<sup>32</sup> Directive 2013/32/EU of the European Parliament and of the Council of 26 June 2013 on common procedures for granting and withdrawing international protection, OJ L 180, 29.6.2013, p. 60–95, article 6.

<sup>33</sup> A. Gatto, P. Goudin, R. Nieminen, '[Schengen area: Update and state of play](#)', Briefing, EPRS, European Parliament, March 2016; p. 3.

<sup>34</sup> Centre for European Policy Studies (CEPS), *An Analysis of the Schengen Area in the wake of recent developments*, Research paper for Policy Department C: Citizens' Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs, DG IPOL, European Parliament, 2016, section 4.2.

Initiatives to regain that trust were outlined by the Commission in the 'Back to Schengen Roadmap'.<sup>35</sup> It aims to return to the normal functioning of the Schengen Area and to lift all internal border controls related to the migratory crisis by the end of 2016 at the latest. In the Commission proposal for a Council recommendation allowing for the continuation of temporary internal border control, it is stated that:

'Border control should only take place during the time necessary to remedy all the serious deficiencies in the management of the Union's external border. Several legislative initiatives and actions undertaken by the Union in order to reinforces its external border management (European Coast and Border Guard, return to a full application of EU asylum law provisions by the Hellenic Republic, stepping up of the implementation of the emergency relocation scheme, the EU Turkey Statement) should also be in place and fully operational without delay and thus further contribute to a substantial reduction in secondary movements of irregular migrants.'<sup>36</sup>

Security concerns were also addressed by the Commission in its Communication on 'Stronger and Smarter Information Systems for Borders and Security' in which it refers to 'evidence that terrorists have used routes of irregular migration to enter the EU and then moved within the Schengen area undetected'.<sup>37</sup> There is clearly room for improvement between Schengen Member States in this area. In a recent study on the Cost of Non-Europe in the areas of Organised Crime and Corruption, a number of shortcomings in the area of police and judicial cooperation were identified.<sup>38</sup> These include a lack in efficiency and quality of justice, as well as insufficient knowledge of European laws and co-operation procedures among law enforcement practitioners. These shortcomings also hamper the effective investigation and prosecution of terrorism within the European Union and the belief in a common security area.<sup>39</sup>

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<sup>35</sup> Communication from the Commission to the European Parliament, the European Council and the Council, Back to Schengen- A Roadmap, COM (2016) 120 of 4.3.2016.

<sup>36</sup> Proposal for a Council implementing decision setting out a recommendation for temporary internal border control in exceptional circumstances putting the overall functioning of the Schengen area at risk, COM(2016) 275 final.

<sup>37</sup> COM(2016) 205 final

<sup>38</sup> W. van Ballegooij, T. Zandstra, [Organised crime and Corruption, Cost of non-Europe Report](#), European Parliamentary Research Service, PE 558.779; Annex I, Centre for European Policy Studies (CEPS), The Cost of Non-Europe in the Area of Organised Crime; Annex II, RAND Europe, The Cost of Non-Europe in the Area of Corruption; Annex III, F. Varese, Briefing paper providing an overall assessment of organised crime and corruption.

<sup>39</sup> Communication from the Commission to the European Parliament, the European Council and the Council, 'Delivering on the European Agenda on Security to fight against terrorism and pave the way towards an effective and genuine Security Union', COM(2016) 230; Cf. Centre for European Policy Studies (CEPS), 'An Analysis of the Schengen Area in the wake of recent developments', Research paper for Policy Department C: Citizens' Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs, DG IPOL, European Parliament, 2016, section

### 3. Economic, social and political impact of the reintroduction of border controls between the Schengen States

As mentioned in section 1, the Schengen Agreement plays a central role in underpinning the four freedoms of the European Single Market – free movement of goods, persons, services and capital - consistently considered among European citizens as one of the most positive effect of the European Union. Hence, a suspension of the agreement and a re-establishment of internal border controls are expected to have not only a negative economic impact on the EU and its Member States, but also a social impact on EU citizens, and most likely also a political impact on the EU project as a whole. It is therefore worth analysing both the potential direct budgetary costs and also the social and political costs of these effects.

#### 3.1. Economic impact

Several recent studies<sup>40</sup> have sought to identify the impact that the abolition of the Schengen Agreement would have on the European economy. However, these studies either did not take into account the running costs of border re-establishment, or included only a brief analysis based on an extrapolation of previous estimates which were often difficult to compare.

A recent European Commission report<sup>41</sup> estimates the costs of Smart Borders implemented at the external borders of the EU; however, the report considers only the existing borders and estimates changes to their running costs, rather than looking at the internal borders as well.

Finally, in its latest Economic Forecast, the European Commission estimated the additional administrative and fiscal costs associated with a hypothetical scenario of generalised border controls within the Schengen area to range between €0.6 billion and €5.8 billion annually. However, these estimates are based on 1993 data related to custom administration costs in the range of 0.1%-0.2% of the total value of intra-community trade and the EU standard cost model for the reduction of regulatory burden from 2004.<sup>42</sup>

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4.3.'How well do borders work as a response to terrorism' calling for more evidence to support the need for the reintroduction of border controls in the fight against terrorism.

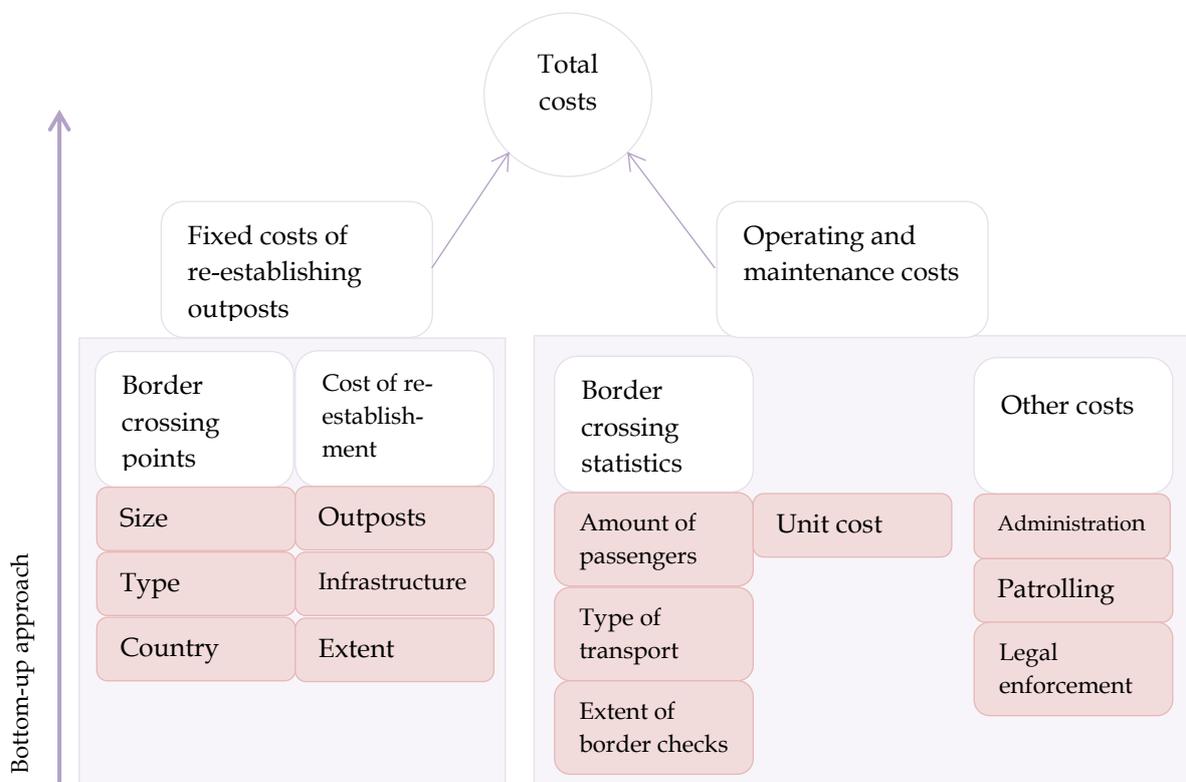
<sup>40</sup> See, for example, , '[Cost of Non-Schengen: Impact of border controls within Schengen on the Single Market](#)', Study, EPRS, April 2016; '[The Economic Costs of Non-Schengen: What the numbers tell us](#)', Policy Paper 162, Jacques Delors Institute, April 2016; and, '[The economic cost of rolling back Schengen](#)', France Stratégie, February 2016.

<sup>41</sup> '[Annexes to the Impact Assessment report](#) on the introduction of an Entry Exit System', SWD(2016) 115 final, Part 3/3, European Commission, 2016.

<sup>42</sup> '[European Economic Forecast – Spring 2016](#): Box 1.3: Estimating a hypothetical scenario of generalised border controls in the Schengen Area', European Commission, 2016as of 12 June 2016.; [Better Regulation Tool #53](#) 'The standard cost model for estimating administrative costs'.

Our study builds on research by RAND that follows a bottom-up cost modelling approach (see figure below), whereby the total expected costs are first broken down by type of expense (i.e. (i) the one-off fixed costs of setting up or reconstructing border crossing points and (ii) the operating, patrolling, administrative and maintenance costs of the day-to-day border controls). A value is then attached to each of the aforementioned type of expenses and each country; finally, these are summed up to provide the total cost estimate. One-off fixed costs are mainly related to the number of border crossing points that each country has, their geographical location (i.e., land, air, or sea), type (i.e. internal or external) and size (i.e. small, medium or large). Operating costs, on the other hand, depend more on the number of border force employees and border crossings, or length and structure of land borders.

Figure 1: Administrative cost estimation diagram



Source: RAND Europe

Each cost estimate is calculated using either country specific parameters or appropriately modified parameters from other countries with available data (i.e., by extrapolation). For example, as regards estimating the operating costs of the border crossing points, only one (Finland) out of the 12 Schengen countries with external land borders provides a

publicly available detailed breakdown of border maintenance costs.<sup>43</sup> Yet, Finland is an exceptional case, as the Finnish-Russian border goes through mostly uninhabited territory with a high degree of natural vegetation and low number of permanent border crossing points. Thus, it was deemed inappropriate to use the Finnish data as a basis for cost extrapolation to other countries other than Sweden and Norway, which have borders very similar to the Finnish-Russian ones. To circumvent the issue, data from Switzerland and Latvia were used. However, both these countries provide data for the overall expenses related to border protection only, thus preventing a detailed analysis. The data were used as a basis for extrapolation to other countries by using the number of border crossing points as the common denominator.<sup>44</sup>

The direct budgetary costs are estimated under three different scenarios:

1. **A two-year 'suspension' of the Schengen Area in the five countries that have currently reintroduced border controls in relation to irregular migration.**

This scenario corresponds to the legal time limit for reinstating temporary border controls in the context of the current Schengen Agreement and in accordance with Article 29 of the SBC; it considers the countries of Austria, Denmark, Germany, Norway and Sweden, and only at places where they have reintroduced them.

Since country officials may believe that the border controls are only temporary, it is unlikely that land border outposts are reinstated in full. Moreover, based on the situation so far and the fact that border controls have been reintroduced at only a subset of the total borders, it is assumed that personnel and other equipment, as well as human resources, would be relocated within countries and thus no, or insignificant, funds would be spent on new equipment or hiring additional staff. Additional equipment would nevertheless have to be purchased to effectively reflect the increased number of passengers to be checked; a conservative estimate is made of an additional €20 000-€40 000 on average to be spent per land border crossing point for all equipment.

Based on these estimates, and taking one-off, fixed costs into account, it is calculated that an amount of anything up to €211.5 million will be spent over the two-year period at the selected borders.

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<sup>43</sup> Available from the Finnish open data service website, <http://budjetti.vm.fi/> (only available in Finnish and Swedish).

<sup>44</sup> The number of border crossing points was used as common denominator for all countries other than Greece, Iceland and Malta, which do not have any land borders with other Schengen countries. For these three countries the volume of passenger flows crossing the country borders – together with passenger cost estimates from the UK – was used as common denominator in the extrapolation process.

**2. A two-year 'suspension' of the Schengen Area and reintroduction of border controls in all Schengen countries at all internal borders.**

Although on a larger scale when compared to scenario 1, this temporary reintroduction of border controls is assumed not to trigger the hiring of additional staff or the full reinstallation of border outposts. Thus, under this scenario too, a conservative estimate is made of an additional €20 000-€40 000 to be spent on average per land border crossing point for all equipment.

Based on these assumptions, the estimated operating cost under this scenario ranges between €2.19 and €3.65 billion annually in all Schengen countries, in addition to €58.6 to €108.6 million one-off fixed costs. Thus, the total budgetary cost for all countries over the two years would range from €4.39 billion to €7.4 billion. The highest costs would be borne by Germany, whereas Greece, Iceland, Malta and Lichtenstein would be the least affected.

**3. Indefinite suspension of the Schengen Agreement in all countries.**

This scenario considers a return to permanent reintroduction of border controls at all internal Schengen borders. Most elements are unchanged from Scenario 2, but under this scenario, fixed costs related to the rebuilding and refurbishment of outposts are considered in full. Indeed, without alternative regional arrangements in place – such as the free traffic zone between Sweden and Norway – which are not considered in this scenario, countries would need to fully re-establish all land border crossing points rather than temporarily substitute the outposts with mobile border force units. Consequently, the one-off fixed costs under this scenario is expected to be much higher compared to Scenario 2. Since a distinction between small, medium and large outposts is made, the fixed costs vary accordingly. Moreover, it is assumed that countries which joined the Schengen Area in 2007 or later would face reduced fixed costs, since these countries would only need to refurbish the existing, albeit no longer used, checkpoints.

Based on these assumptions, the estimated operating cost under this scenario ranges between €2.19 and €3.65 billion annually in all Schengen countries with an additional €7.41 to €19.76 billion one-off fixed costs. Thus, the total budgetary cost for all countries over, for example, a 10-year period is estimated to range between €29.31 billion and €56.26 billion.

Finally, following the scenario outlined in a recent EPRS report,<sup>45</sup> which considers the indefinite suspension of the five countries from the Schengen Area that have recently reintroduced border controls, it is calculated that they would

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<sup>45</sup> [Cost of Non-Schengen: Impact of border controls within Schengen on the Single Market](#), Study, EPRS, April 2016

face one-off fixed costs of €3.17 to €7.70 billion and annual operating costs of €0.92 to €1.54 billion. Thus, the total budgetary cost for these five countries over, for example, a 10-year period is estimated to range between €12.37 and €23.1 billion.

The abovementioned costs do not take into consideration potentially higher costs of visa proceedings as a result of third-country nationals having to apply for multiple visas when visiting more than one Schengen country – as opposed to the current framework of a single Schengen visa; the additional possibility for some cross-border roads to be closed or given local border traffic status rather than guarded, thus reducing the potential total costs, is not considered in the model either. Moreover, costs are calculated using a single cost estimate for a large variety of countries – thus inherently introducing room for error in the analysis – and are based on the assumption that the traffic flows across Europe would remain constant at their current levels (the number could be higher due to the continuing growing trend or could be lower as a result of border controls reintroduction).

### **3.2. Social impact: Crime and security**

The Schengen Area is not just about the abolition of internal border controls; such measures are accompanied by measures aimed at enhancing internal security. In particular, the sharing of data<sup>46</sup> and increased cross-border police cooperation are instrumental in improving the fight against cross-border crime.

This raises questions as to whether:

1. the lifting of internal border controls has had an impact on crime levels/ the fight against crime, notably in border regions,
2. the increased cross-border cooperation has created synergies in the individual Member States' fight against crime.

This section builds on research by RAND which investigated cross-country crime trends between different groups of Schengen and non-Schengen countries before and after the 2007 Schengen enlargement. In particular, the focus was placed on the differences in the trends between the then existing Schengen States and the newly acceding Schengen States (Czech Republic, Poland, Hungary, Slovakia, Slovenia, Estonia, Latvia and Lithuania).

The 'big' Schengen enlargement to new Member States that had joined the EU in 2004 took place in December 2007. Emphasis was therefore placed on the trends before and after 2008, the year in which one would expect changes in crime statistics if the opening

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46 A. Orav and A. D'Alfonso, , [Smart Borders: EU Entry/Exit System, EU Legislation in progress](#), EPRS, European Parliament, 11 July 2016

of borders is related to crime trends. To counter the deficiency of comprehensive quantitative data on actual cross-border crimes, three different data sources were used, namely: (a) UNODC crime statistics (2003-2014), (b) European Social Survey (2002-2014), (c) Eurostat regional crime data (2008-2010). Based on these, using econometrics, the researchers investigated how crime rates evolved:

1. in the existing Schengen States - namely, how crime rates evolved between countries which used to have a land border with the Schengen countries which acceded in 2007 (i.e. Austria, Germany, Italy, Finland and Sweden) and those which did not have such a border, and
2. in the newly acceding Schengen States (i.e., Czech Republic, Poland, Hungary, Slovakia, Slovenia, Estonia, Latvia and Lithuania) and their neighbouring non-Schengen States (i.e. Bulgaria, Romania, Croatia, Moldova and Ukraine).

At this point, several issues which occur when analysing crime trends across countries should be considered. Firstly, police reported crimes may underestimate the true number of committed crimes. For instance, there is good reason to assume that people may not report minor crimes to the police because they feel ashamed of being a victim, or because the lost monetary value is too little to justify the effort to report the crime, or the person has a lack of trust in the ability of the police to find a criminal.<sup>47</sup> Nevertheless, criminological literature<sup>48</sup> suggests that reported crime data is appropriate to study the evolution and trends in crime across countries under the assumption that recording procedures do not change substantially over time. Secondly, when using reported crimes for cross-country analysis, one has to be cautious due to heterogeneity of reporting rates across time and countries. For instance, reporting rates differ across countries, and hence, it is suggested to compare reported crimes further with crime victimisation survey data.<sup>49</sup> Thirdly, another problem when analysing crime statistics is that the classification of crime may differ across countries.

In order to circumvent, to some extent, the differences in crime classification between countries and to minimise the effect of the aforementioned issues in the analysis that follows, two different categories of crime were examined: homicides and 'acquisitive crime' - including burglary, theft, car theft, and robbery.

Moreover, in addition to police reported crimes, crime victimisation data from the European Social Survey were also used and standard econometric techniques were applied.

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<sup>47</sup> P. Buonanno, F. Drago and R. Galbiati, (2014): 'How much should we trust crime statistics? A comparison between the EU and the US', LIEPP Working Paper no 19.

<sup>48</sup> M. Aebi, and A. Linde (2010) 'Is there a Crime Drop in Western Europe?' *European Journal of Criminal Policy and Research*, 16, pp 251-277.

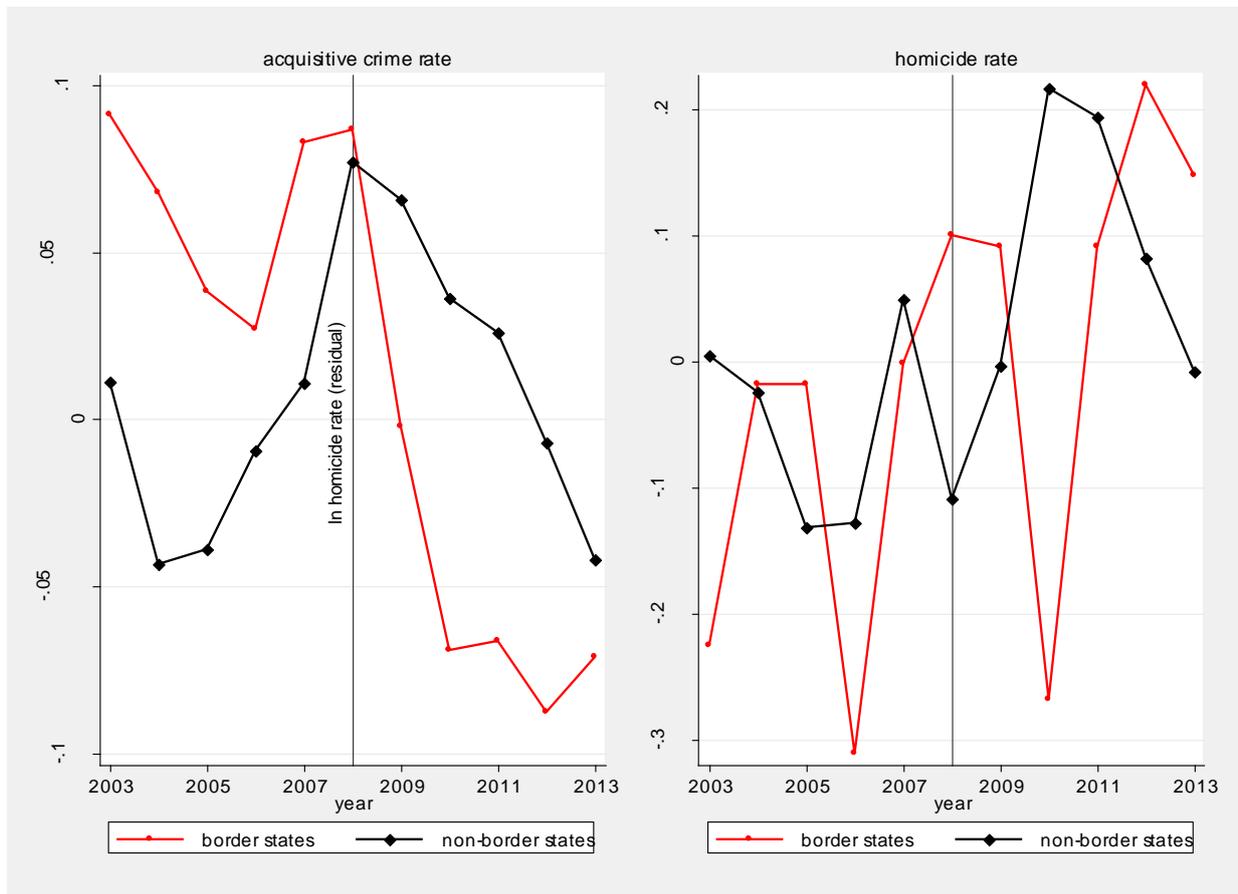
<sup>49</sup> J. Van Dijk, J. Van Kesteren, and P. Smith (2007) 'Criminal Victimization in International Perspective: Key Findings from the 2004-2005 ICVS and EU ICS. The Hague, Ministry of Justice.

### 3.2.1. Cross country trends in acquisitive crime rates (vehicle theft, robberies, and burglaries) and homicide (2003-2013)

#### (i) in the existing Schengen States

Interestingly, as depicted in Diagram 1 below, a downward trend has been observed after 2008 for acquisitive crime in the existing Schengen Member States. Moreover, the decreasing trend is somewhat stronger for those states that had direct borders with the newly acceding Schengen States after 2007. Looking at homicide rates, we cannot observe a clear upward or downward trend for either of the two groups, thus implying that a clear association could not be made – while from 2008 to 2010 there is some slight increase in homicide rates in the existing Schengen states without direct borders with the new ones the trend is falling.

Diagram 1: Trends in acquisitive crime and homicide rates in existing Schengen states before and after 2007 Schengen enlargement



Source: RAND Europe (2016)

In order to take into account the effect of other factors, for example a country's GDP per capita, an econometric model has been used; the summarised results are depicted in the table below. The findings should be read as follows: in column (1) data from the UNODC

are used regarding the police reported acquisitive crime rate in the existing Schengen countries that had direct borders with the new ones (i.e. Austria, Germany, Italy, Sweden and Finland). It emerges that the level in those crimes reduced by 28.03% after the Schengen enlargement. At the same time, the respective acquisitive crime rate in the other existing Schengen States without direct borders with the newly added Schengen States only reduced by 7.87%. Thus it may be observed that there is a difference of 20.16% between the two different groups of countries. This might imply that the Schengen enlargement and the subsequent abolition of border controls did not lead to an increase in the police reported acquisitive crime rate in the existing Schengen countries that had a direct border with the newly added ones. In fact, the empirical findings may suggest quite the opposite, namely that Schengen enlargement may be associated with lower levels of police reported acquisitive crime rates.

**Table 1 : Summary table trends in crime rates in existing Schengen states before and after 2007**

		(1)	(2)	(3)	(4)
<i>Existing Schengen states</i>		<i>police reported acquisitive crime</i>	<i>police reported homicide</i>	<i>self-reported acquisitive crime</i>	<i>self-reported feeling secure</i>
<i>Data source:</i>		<i>UNODC</i>		<i>ESS</i>	
$\Delta$ before 2008 - after 2008	(1) No direct border	-7.87%	-13.86%	-1.10%	0.12%
	(2) Direct border	-28.03%	-10.17%	-5.83%	4.40%
(2) -(1)		-20.16%	3.69%	-4.73%	4.28%

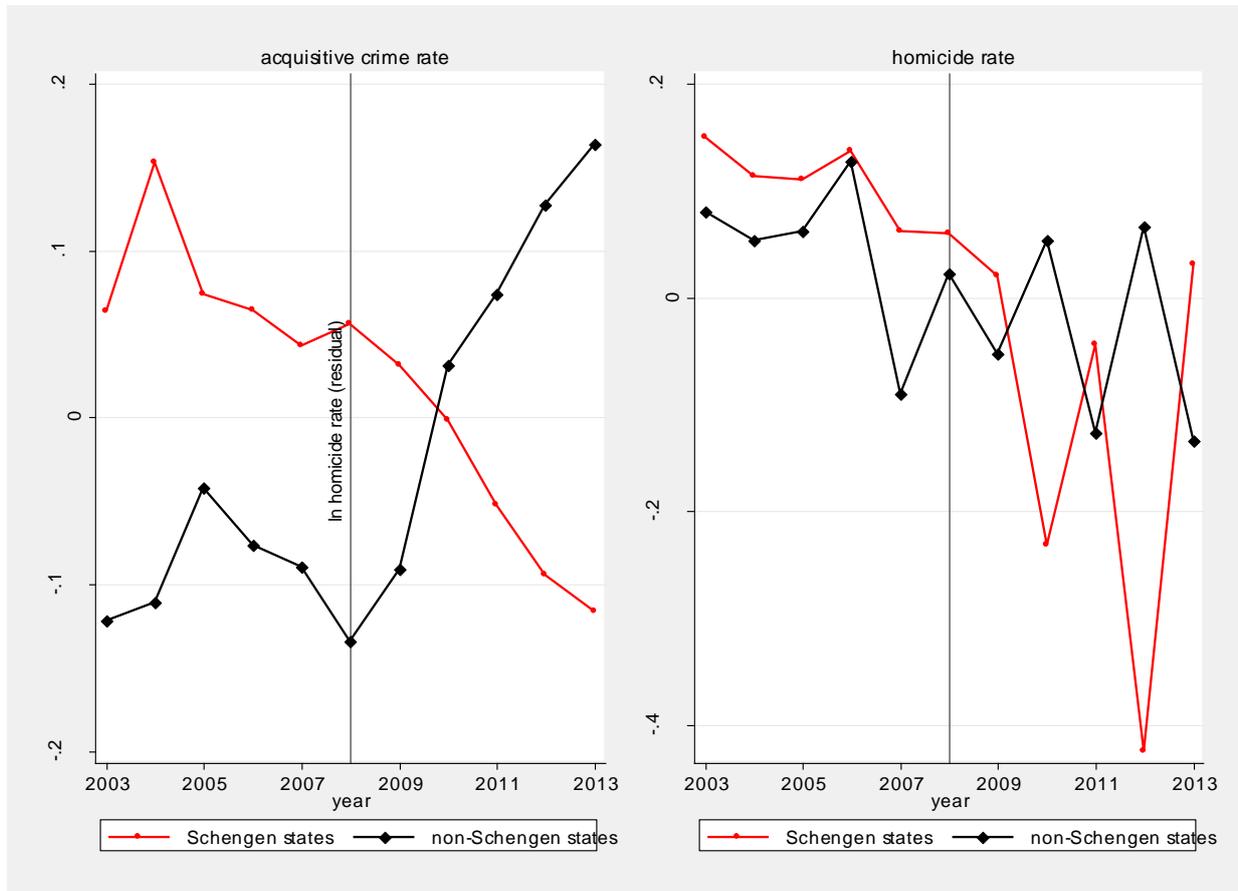
Notes: based on parameter estimates reported in table AC.1 in Appendix C.

In sum, in the existing Schengen States, crime rates are generally falling; but as the data suggests, that fall is even more pronounced in those Schengen States with direct (internal) borders with the countries that joined Schengen in 2007. This applies for police reported crime - column (1) - as well as self-reported crime victimisation rates - column (3). In addition, individuals are more likely to report that they feel secure in their neighbourhood at night in states with direct borders - column (4).

### **(ii) in the newly acceding Schengen Member States and non-Schengen States**

The figure below depicts trends in acquisitive crime and homicide rates for the newly acceding Schengen States (i.e. Czech Republic, Poland, Hungary, Slovakia, Slovenia, Estonia, Latvia and Lithuania) and their neighbouring non-Schengen states (i.e. Bulgaria, Romania, Croatia, Moldova and Ukraine). The rate of acquisitive crime is falling in the pre-2007 period for the newly acceding Schengen States and continues with even a slightly stronger downward trend thereafter. As regards the homicide rate in the new Schengen States, there is a relatively strong fluctuation in the post-2007 period and hence a clear trend cannot be determined.

Diagram 2 : Trends in acquisitive crime and homicide rates in newly acceding Schengen and Non-Schengen states before and after 2007 Schengen enlargement



Notes: based on UNODC crime statistics. Entries depict the residual crime rates for different groups of countries over time after taking into account country- and time-specific effects based on a linear regression.

As in section (i) above, in order to take into account the effect of other factors - for example, a country's per capita GDP - an econometric model has been developed and its results are depicted in the table below. This table reveals that, according to UNODC data, after their inclusion in the Schengen Area in 2007, the newly added Schengen States report 14.05% lower acquisitive rates of crime than their non-Schengen neighbours - column (1). In addition, individuals in the newly added Schengen States feel relatively more secure after the abolition of the border controls than their non-Schengen counterparts - column (4).

**Table 2 : Summary table trends in crime rates in newly acceding Schengen and Non-Schengen states before and after 2007**

		(1)	(2)	(3)	(4)
<u>Newly acceding Schengen and Non-Schengen states</u>		<i>police reported acquisitive crime</i>	<i>police reported homicide</i>	<i>self-reported acquisitive crime</i>	<i>self-reported feeling secure</i>
<u>Data source:</u>		UNODC		ESS	
$\Delta$ before 2008 - after 2008	(1) No direct border	-15.69%	-19.29%	-6.48%	-18.32%
	(2) Direct border	-29.74%	-43.20%	-27.21%	24.62%
	(2) -(1)	-14.05%	-23.91%	-20.73%	42.94%

Notes: based on parameter estimates reported in table AC.2 in Appendix C.

The abovementioned empirical findings suggest that the 2007 Schengen enlargement is associated with lower acquisitive crime rates in both the newly acceding Schengen States and the existing Schengen States that had a direct border with them. At first, these findings may seem counterintuitive; yet, this reduction may be due to the fact that the improved cross-border police cooperation and law enforcement mechanism in light of Schengen could have made the fight against acquisitive crime more efficient. Hence, resources that were once used to guard border controls could now be redirected and focus on other activities such as combating cross-border acquisitive crime. Nonetheless, it is important to note that these findings should be interpreted as associations and cannot be read as causal effects of Schengen reducing crime levels. Moreover, due to lack of quantitative data, the effect of Schengen on other types of organised crime, such as human trafficking, was not empirically investigated. Consequently, the findings should be interpreted with caution.

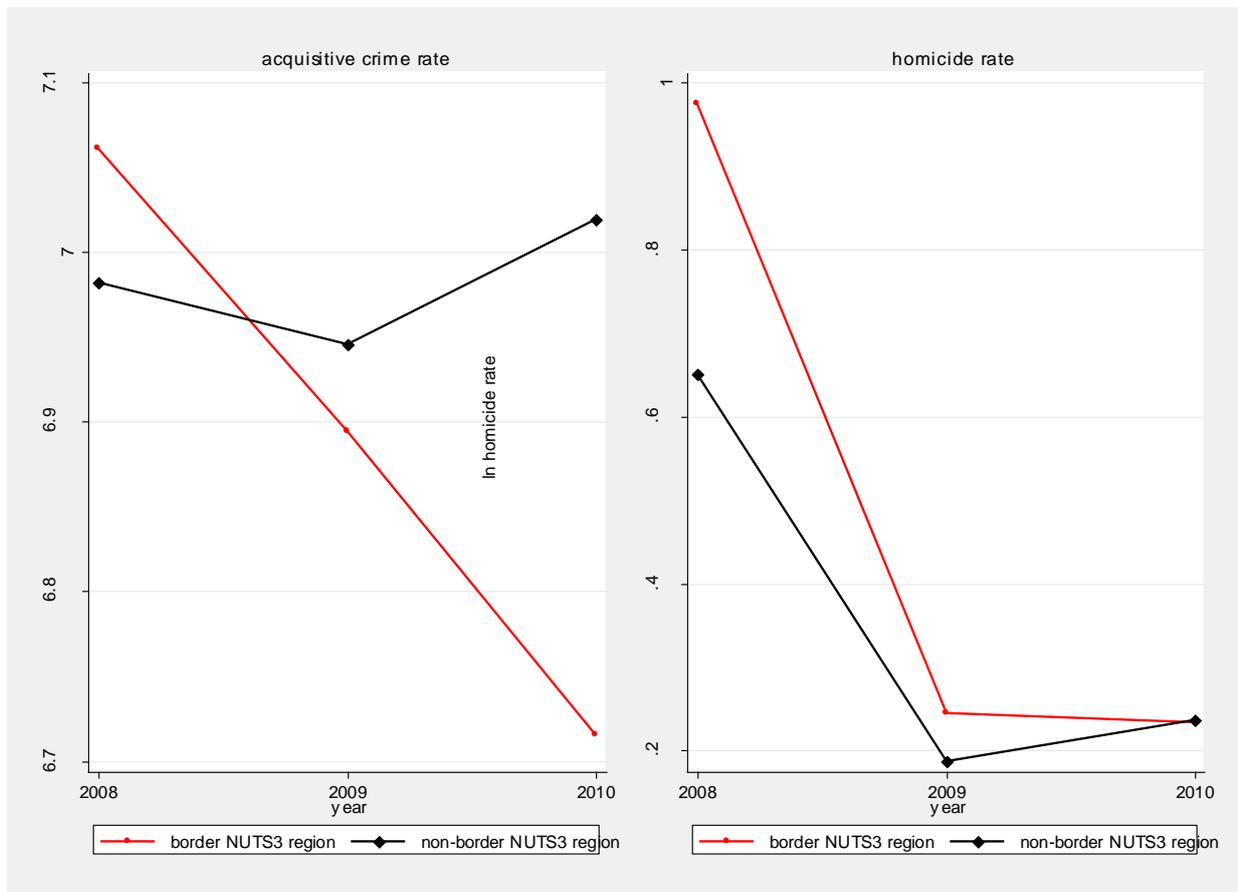
### 3.2.2. Cross-regional trends in acquisitive crime and homicide rates – border vs. non-border regions

This section builds on research that investigated how trends in crime rates evolve within a group of countries by comparing border to non-border regions. Regional police reported crime level data (acquisitive crime data, namely burglary, robbery and car theft, as well as homicide data) for Eurostat's Nomenclature of Territorial Units for Statistics level 3 (NUTS 3) regions were used as a proxy for acquisitive crime. However, due to data limitations – the abovementioned regional data were only available for 2008, 2009 and 2010 – it was only possible to compare the evolution of trends in crime rates for border versus non border NUTS 3 regions after the 2007 enlargement. Moreover, the analysis considered only NUTS 3 regions of countries with direct land borders with the newly acceding Schengen Member States as well as with maritime links to them.

Diagram 3 below depicts the trends for NUTS 3 regions with borders that were abolished as a result of a Schengen area enlargement in 2007 compared to NUTS 3 regions without such borders within the same country (i.e. Austria, Germany, Italy Sweden and Finland),

after adjustment of some parameters.<sup>50</sup> The findings suggest that the examined crime rates tend to decrease faster for border regions than for non-border regions. While it is important to note that criminal activity spans to more categories than those taken into account in the analysis, and that the analysis cannot identify any causal effect that the Schengen enlargement may have had on crime rates in border countries and their border regions, the results do not encourage the hypothesis that the abolition of internal borders led to an increase in crime or that border regions would be particularly affected by this phenomenon.

**Diagram 3 : Regional trend in acquisitive crime (burglary, car theft and robbery) and homicide rates between border and non-border NUTS 3 regions**



### 3.2.3. The fight against drugs trafficking before and after entering Schengen

Theoretical arguments about the impact of open borders on the fight against drug trafficking are conflicting. On the one side, some may argue that there is a clear 'border effect' and that the lack of border controls makes combating drug trafficking more difficult; indeed, it can be stated that once the drug has passed the external borders, no

<sup>50</sup> Adjustment include regional GDP per capita, regional type (metropolitan or mountainous), net migration and total population of the region.

further controls should be expected.<sup>51</sup> On the other side, one could argue that the improved cross-border police cooperation and law enforcement mechanism in light of Schengen could have made the fight against drug trafficking more efficient. Following this assumption, it can be considered that resources that were once used to guard the border controls could now be redirected and focus on other activities such as combating cross-border crime. This section builds on research which examined whether the abolition of border controls in light of Schengen alters the ability of countries to tackle cross-border drug trafficking. To deal with problems related to (i) imperfect information between buyers and sellers; and (ii) the role of enforcement which affects drug production and distribution routes, the study is focused only on drugs with virtually no production within Europe, namely cocaine and heroin.

Since the data on prices and purity are only available for the period since 1995, and since some observations before the country in question entered the Schengen area are needed to do a pre- and post-Schengen comparison, the sample included all European countries from the 2000 Schengen enlargement round to the 2007 enlargement<sup>52</sup>, as well as countries which have never been part of the Schengen area (Ireland and UK) and non-EU countries, such as Turkey, as comparison groups.

The findings suggest that the abolition of border controls is positively associated with cocaine and heroin seizures. On average, it is estimated that the countries which entered the Schengen area after 2000 have increased the quantity of seized cocaine and heroin by around 50% and 67% respectively. For example, a pre-Schengen annual average of around 50kg of seized cocaine would increase to around 75kg after Schengen and similarly a pre-Schengen annual average of 60kg of seized heroin would increase to 100kg after Schengen.

The fact that abolishing border controls may increase the amount of drug seizures might be explained by better cross-border police cooperation in light of Schengen which could, in turn, have led to better or more frequent information exchange. In addition, resources that were used pre-Schengen to guard border controls could be redirected post-Schengen and focus on other activities such as combating cross-border drug trafficking.

Further research will be needed to confirm these trends for other offences as well as the link between (the absence of) border controls and crime rates.

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<sup>51</sup> McCabe, Ryan, 2015, 'Measuring the border effect: How Schengen Impedes Heroin confiscation', as of 13 June 2016 available at [http://www.etd.ceu.hu/2015/mccabe\\_ryan.pdf](http://www.etd.ceu.hu/2015/mccabe_ryan.pdf).

<sup>52</sup> Switzerland is excluded from the analysis, because, despite being a Schengen Member, it still has running border crossing points to check the flow of goods.

### 3.3. Political impact: Trust

As mentioned in section 2, Member State justification for the reintroduction of internal border controls points to a political climate characterised by a loss of trust in the (other) Member States' ability to effectively guard the external borders, process asylum applications and cooperate together in the fight against terrorism and other serious crimes. The trust between Member States has not been measured in academic research.<sup>53</sup> Trust among the public, however, has been measured in the European Social Survey, notably as regards trust in others, trust in politicians, national parliaments and the European Parliament, the police, or the legal system. Using these data, one can compare the change in trust levels after 2008 between two different groups of countries, namely, the difference (1) between existing Schengen countries that had direct borders with the new ones, and (2) between the newly acceding Schengen States and non-Schengen countries.<sup>54</sup>

Overall, for the newly acceding Schengen Member States an increase in public trust is found across the board after the inclusion in the Schengen Area, whereas over the same time period public trust decreased in their neighbouring, non-Schengen countries. In addition, overall trust in the existing Schengen Member States is increasing across the board but tends to be more pronounced in the existing Schengen states with direct borders with the new states entering the area in 2007.<sup>55</sup>

When similar analysis is applied on a regional level, comparing border and non-border regions within countries in light of the Schengen enlargement, it is found that the trends across different measures of trust are generally very similar for border and non-border regions for the sample of both the newly acceding Schengen states and , as well for the existing Schengen states.<sup>56</sup>

Therefore, one can conclude that the abolition of border controls in light of Schengen has not increased the perception of insecurity among EU citizens. Trust among the public in the EU seems to have been undermined though, but rather due to the European Union's failure to effectively address the refugee crises,<sup>57</sup> as illustrated by the figure taken from the Autumn 2015 Eurobarometer survey below.

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<sup>53</sup> RAND (2016), p. 45.

<sup>54</sup> See section 3.2, for a more detailed list of countries compared.

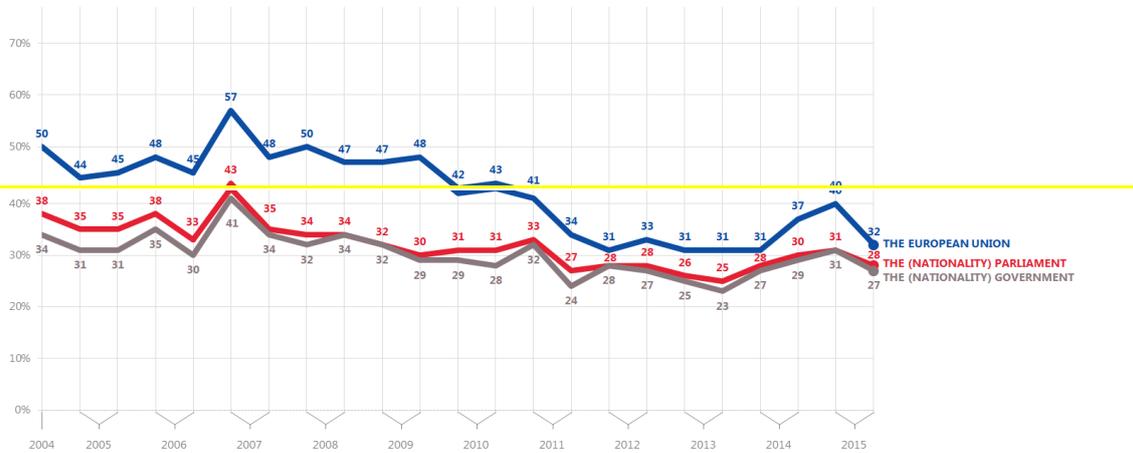
<sup>55</sup> RAND (2016), p. 47

<sup>56</sup> RAND (2016), p. 48

<sup>57</sup> See '[Debating Europe, Has the refugee crisis damaged trust in the European project?](#)'

Figure 2: Trend of the trust in national governments and parliaments, and in the European Union

QA8a I would like to ask you a question about how much trust you have in certain media and institutions. For each of the following media and institutions, please tell me if you tend to trust it or tend not to trust it.  
(% - EU - TEND TO TRUST)



Source: Standard Eurobarometer 84 (Autumn 2015)<sup>58</sup>

Nevertheless, the European Citizen’s Action Service, which runs ‘Your Europe Advice’ providing legal advice for EU citizens, has experienced a 9.4% increase in enquiries in 2015 compared to 2014, which might be indicative of an increasing sentiment of uncertainty by citizens about the practical implementation of the freedom of movement.<sup>59</sup>

#### 4. Possible options for action at EU level

Based on the expert research, this study estimates that the costs linked with the reintroduction of border controls could range between €0.05 billion and €20 billion in one-off costs and €2 billion and €4 billion in annual operating costs - the exact figure depending on their scope and length. These amounts correspond to around 0.02%-0.03% of GDP of the Schengen area.

As regards the offences investigated, the abolition of border controls in the light of Schengen has not led to higher crime rates, nor has the 2007 Schengen enlargement increased the perception of insecurity among EU citizens.<sup>60</sup> On the contrary citizens’ trust in each other and in public institutions seems to have increased. It is important to

<sup>58</sup><http://ec.europa.eu/COMMFrontOffice/PublicOpinion/index.cfm/Survey/getSurveyDetail/instruments/STANDARD/surveyKy/2098>

<sup>59</sup> CEPS (2016), Annex IV; [http://europa.eu/youreurope/advice/about\\_en.htm](http://europa.eu/youreurope/advice/about_en.htm)

<sup>60</sup> These findings should nevertheless be interpreted as associations only and cannot be read as causal effects. They also need to be confirmed by research into other offences. See RAND Europe, A Research Paper on The Cost of Non-Schengen: Civil Liberties, Justice and Home Affairs Aspects, p. 66.

note that the abolition of border controls has been accompanied by measures to facilitate cross-border police and judicial cooperation, for instance adding to the number of illicit drug seizures. The societal benefits of this cooperation could be undone by a return to permanent border controls.

Though the migration and refugee crisis was not caused by deficiencies in the Schengen governance framework, the integrity of the Schengen Area has been affected by it.<sup>61</sup> The need for changes to the current Schengen governance framework should be further considered based on the compliance with the implementing decision of 12 May 2016 allowing five Schengen Member States (Austria, Denmark, Germany, Norway and Sweden) to maintain controls at certain parts of their internal border for another six months (until November 2016).<sup>62</sup>

The Schengen Member State notifications seeking to justify the reintroduction of internal border controls point to a political climate in which there is a loss of trust in the ability of (other) Member States to effectively guard the external borders, process asylum applications and cooperate together in the fight against terrorism and other serious crimes. Trust among the public in the EU also seems to have been undermined by the failure of the Union to effectively address the deficiencies exposed by the refugee crises. Regaining inter-Member State and EU citizen's trust in the EU's ability to tackle the deficiencies exposed by the refugee crisis should therefore be the immediate priority.

The deficiencies exposed by the refugee crisis and the resulting loss of trust could be addressed by more concerted action at EU level fostering solidarity and cooperation between the Member States. Such initiatives should also take better advantage of EU agencies. In that context, a comprehensive assessment of the Cost of non-Europe in the Area of Freedom, Security and Justice could help to shed more light on the untapped potential of European integration in this field.<sup>63</sup>

This notwithstanding, as regards the scope of the current study, measures in the following areas should be considered:

1. External border control
2. Police and judicial cooperation
3. Asylum and Migration.

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<sup>61</sup> RAND Europe, A Research Paper on The Cost of Non-Schengen: Civil Liberties, Justice and Home Affairs Aspects, p. 67: 'With respect to the Schengen governance framework, our analysis found that current arrangements are largely fit for purpose.'; CEPS (2016), p. 74: 'The 2013 Schengen Governance Package is fit for purpose and recent developments do not justify new legislative amendments or reforms to the Schengen Borders Code.'

<sup>62</sup> Council of the European Union, Interinstitutional File 0140/2016 NLE, '[Council Implementing Decision](#) setting out a Recommendation for temporary internal border control in exceptional circumstances putting the overall functioning of the Schengen area at risk'.

<sup>63</sup> Cf. European Criminal Law Association's Forum (EUCRIM) [special edition](#) on the Cost of Non-Europe in the Area of Freedom Security and Justice.

### 1. External border control

Action in this area needs to go beyond the current crisis-response measures. A more sustainable solution should be based around the recent creation of a European Border and Coast Guard. The EBCG should be able to monitor the situation at external borders and intervene in situations where insufficient external border controls put the overall functioning of the Schengen area at risk.<sup>64</sup> Other relevant measures would concern the introduction of enhanced border checks against relevant databases<sup>65</sup> as well as of an entry-exit system<sup>66</sup> aimed at improving the identification of visa over-stayers and irregular migrants; moreover, criteria for the detection of terrorist travellers should be developed.<sup>67</sup>

### 2. Police and judicial cooperation

Action in this area should revolve around the coherence and interoperability of data collection, exchange and analysis, including by expanding the use and functionality of the Schengen Information System.<sup>68</sup> The lack of efficiency and quality of justice, as well as the insufficient knowledge of European laws and co-operation procedures, notably co-operation in the framework of Europol and Eurojust, among law-enforcement practitioners, needs to be addressed through budgetary and training measures.<sup>69</sup>

### 3. Asylum and migration

Action in this area should aim to ensure a proper implementation of the asylum *acquis* and to adopt the proposed reforms of the European Asylum System<sup>70</sup>, in particular of the Dublin regulation<sup>71</sup>, including as regards the relocation of asylum seekers and

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<sup>64</sup> [European Border and Coast Guard: Parliament and Council strike provisional deal](#), press release, European Parliament, June 2016; A. Gatto, [European Border and Coast Guard System](#), Briefing EU legislation in progress, EPRS, August 30, 2016.

<sup>65</sup> Schengen Borders Code: reinforcement of checks against relevant databases at external borders, 2015/0307(COD)

<sup>66</sup> Entry/Exit System (EES), 2016/0106(COD)

<sup>67</sup> Commission recommendation of 15 June 2015 amending the Recommendation establishing a common 'Practical Handbook for Border Guards (Schengen Handbook)' to be used by Member States' competent authorities when carrying out the border control of persons (C (2006) 5186 final) C(2015) 3894 final.

<sup>68</sup> Communication from the Commission to the European Parliament and the Council, Stronger and Smarter Information Systems for Borders and Security, COM(2016) 205 final

<sup>69</sup> W. van Ballegoij, T. Zandstra, [Organised Crime and Corruption, Cost of non-Europe Report](#), EPRS, PE 558.779; Annex I, Centre for European Policy Studies (CEPS), The Cost of Non-Europe in the Area of Organised Crime; Annex II, RAND Europe, The Cost of Non-Europe in the Area of Corruption; Annex III, F. Varese, Briefing paper providing an overall assessment of organised crime and corruption.

<sup>70</sup> D.Ivanov, [Towards a reform of the Common European Asylum System](#), Plenary At a Glance, EPRS, 4 May 2016

<sup>71</sup> D. Ivanov, [Reform of the Dublin System](#), Briefing, EU legislation in progress, EPRS, September 2016; F. Maiani, [The Reform of the Dublin III Regulation](#), Policy Department, EP, June 2016.

support to national authorities in charge of deciding on asylum applications, and cooperation with countries of origin and transit.<sup>72</sup>

The adoption and implementation of these measures and actions should put an end to the current situation in which there is a 'reliance on a small number of Member States to provide an EU-wide public good'.<sup>73</sup> The public good at stake here is a genuine area of freedom, security and justice in which the free movement of persons is ensured in conjunction with appropriate measures with respect to external border controls, asylum, immigration and the prevention and combating of crime.

All measures mentioned above should be considered on their individual merits, based on a proper impact assessment including as regards their compliance with the relevant fundamental rights and free movement standards in accordance with primary and secondary EU law. Once adopted, the transposition and application of the measures on the ground should be monitored to ensure their practical effectiveness.

## Recommendation

More concerted action at EU level is needed so as to allow the Schengen area to return to its full functioning. The need for changes to the current Schengen governance framework should be further considered based on the compliance with the implementing decision of 12 May 2016 allowing five Schengen Member States to maintain controls at certain parts of their internal border for another six months until November 2016. Regaining inter-Member State and EU citizens' trust should, however, be an immediate priority, notably through the organisation of solidarity and cooperation between Member State authorities, supported in their work by EU agencies.

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<sup>72</sup> Recast Dublin Regulation COM(2016) 270; Recast EURODAC COM (2016) 272; proposal for a European Agency for Asylum COM(2016) 271; EU list of safe countries of origin COM(2015) 452; Permanent relocation scheme COM(2015) 450; European travel document for the return of illegally staying third-country nationals COM(2015)668 final; European Resettlement Scheme C(2015) 3560 final; EU Turkey Joint Action Plan, [Council EU-Turkey statement](#)

<sup>73</sup> RAND Europe, A Research Paper on The Cost of Non-Schengen: Civil Liberties, Justice and Home Affairs Aspects, p. 67.

## **Annex**

# **A Research Paper on the Costs of Non-Schengen from a Civil Liberties and Home Affairs Perspective**

**by RAND Europe**

### **Abstract**

This paper examines the costs of non-Schengen from a civil liberties and home affairs perspective, building on recent evidence describing the potential economic and social costs that would accrue if the Schengen agreement were to be abolished and border controls re-introduced. The paper estimates the cost of re-introducing internal border controls in the Schengen Area at around €0.1-19bn in one-off costs and around €2-4bn in annual operating costs, corresponding to around 0.02-0.03 per cent of Schengen Area GDP. Empirical findings of the analysis conducted in this paper also suggest that the abolishment of border controls as a result of Schengen is not associated with higher crime rates either in border or in non-border regions. In addition, the lack of border controls has not hampered the ability of Schengen states to combat the illicit drug trade.

#### AUTHOR

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## Abbreviations

AFIS	Automatic Fingerprint Identification System
AFSJ	Area of Freedom, Security and Justice
CJEU	Court of Justice for the European Union
CRI	Common risk indicator
EASO	European Asylum Support Office
EBCG	European Border and Coast Guard
EC	European Commission
ECA	European Court of Auditors
EEAS	European External Action Service
EES	Entry-Exit System
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EMLOs	European Migration Liaison Officers
EP	European Parliament
EPRIS	European Police Records Index System
ESS	European Social Survey
ETA	Electronic Travel Authority (Australia)
eTA	Electronic Travel Authorization (Canada)
ETIAS	EU Travel Information and Authorisation System
EU	European Union
eu-LISA	European Agency for the operational management of Large-Scale IT Systems
FRA	Fundamental Rights Agency
GDP	Gross domestic product
JHA	Justice and Home Affairs
LIBE	Civil Liberties, Justice and Home Affairs
MSF	Médecins Sans Frontières
NGO	Nongovernmental organisation
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
PNR	Passenger Name Record
PPP	Purchasing power parity
RABIT	Rapid Border Intervention Team
SBC	Schengen Borders Code
SCH-EVAL	Schengen Evaluation Working Party
SIRENE	Supplementary Information Request at the National Entry
SIS	Schengen Information System
TFEU	Treaty on the Functioning of the European Union
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNODC	United Nations Office on Drugs and Crime
VIS	Visa Information System
WDI	World Development Indicators

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## Executive summary

Amid the recent and unprecedented influx of migrants into the European Union, the functioning of Schengen has been placed under considerable strain, with several member states re-introducing temporary controls on parts of their internal borders. Recent evidence suggests that suspensions of Schengen are associated with economic costs related to trade barriers and traffic delays at border crossing points, among others things.

Against this background, the European Parliament has commissioned RAND Europe to investigate the economic, social and political costs of non-Schengen, with a particular emphasis on civil liberties and home affairs. This study aims to contribute to discussions about Schengen's sustainability in the light of the migration crisis by identifying the costs of re-introducing border controls between Schengen member states, and by identifying the potential benefits of more concerted action at EU level compared to the lack of such action, or to action by member states on their own.

The remit of this study includes both economic costs (such as re-introducing internal border controls) along with wider social and political costs (such as crime, and measures of security and trust). The focus on the latter types of cost reflects the fact that, as well as its economic benefits, Schengen has also been a building block of the EU's Area of Freedom, Security and Justice, and as such has an importance beyond the purely economic.

Using a bottom-up cost-estimation approach, we estimated the fixed and operating costs of re-establishing internal border controls within the Schengen Area. Under three scenarios, which differ in the assumption made about the length and scope of the re-establishment of border controls, we conclude that reversing Schengen could cost current Schengen states anywhere between €0.1bn and €19bn in fixed one-off costs, depending on the extent of border crossing point reconstruction, and around €2–4bn in annual operating costs. The former corresponds to around 0.01–0.16 per cent and the latter to around 0.02–0.03 per cent of the current Schengen Area GDP.

We also investigated the associations between Schengen and the abolishment of border controls with crime, security and trust of citizens in national and European institutions. Our findings suggest that, contrary to the predictions of basic economic and criminological theory, rates in acquisitive crime (burglary, car theft, theft and robberies) have not increased following the abolition of internal border controls. On the contrary, we found a more pronounced downward trend after the 2007 Schengen enlargement in levels of crime in existing Schengen states with direct borders to the newly acceding Schengen states compared to existing Schengen states lacking a direct border with new members. This finding also held when we looked into border and non-border regions within these countries. We also found positive associations between the abolition of internal border controls as a result of Schengen and the volume of seized drugs (cocaine and heroin), perhaps as a result of improved cross-border police cooperation and information exchange. In addition, our findings suggest an upward trend in European citizens' general trust in national and European institutions following the Schengen enlargement of 2007. This is an important finding as trust is seen as a major enabling factor in the working of the Schengen Area.

In light of this identification and, where possible, quantification of the costs of non-Schengen, this study discusses a series of possible steps which could be taken to help return to a fully functioning Schengen Area and thus mitigate the potential costs outlined above.

With respect to the Schengen governance framework, our analysis found that the current arrangements are largely fit for purpose. There are areas where further steps can be made (and are underway), such continuing to improve member states' use of and participation in the Schengen evaluation mechanism and the Schengen Information System. However, given the current political context, with its breakdown in trust and lack of solidarity among member states, action in this area alone is unlikely to address the fundamental needs and concerns which have led member states to re-introduce internal border controls. To achieve this goal, other steps may need to be considered in the areas of external border control, police and judicial cooperation, and asylum and migration acquis.

Regarding external border controls, institutional capacity may be increased following the establishment of the European Border and Coast Guard (EBCG) Agency, although the creation of the EBCG would not address challenges stemming from reliance on member states' resources. Greater effectiveness of border checks can be achieved through initiatives such as systematic checks on EU nationals, the Entry-Exit System, and the use of common risk indicators.

Existing police and judicial cooperation arrangements would also benefit from improvements in information collection and sharing between agencies and member states. In this regard, closing existing data gaps and increasing the interoperability of existing (and any new) information systems are two areas for improvement. However, action in these two areas may have only limited impact on the immediate needs of member states that have led to the reintroduction of internal border controls.

Lastly, action in the area of migration, asylum and external relations may also result in benefits for the Schengen system by addressing underlying member states' concerns, namely the arrival and subsequent unmanaged secondary movements of migrants. This appears to be the case with the currently pursued policy of reducing the number of irregular arrivals, to which a series of recent policy proposals may provide a more developed legal basis. However, this approach leaves a series of major fundamental right concerns unaddressed. In addition, as with the EBCG proposal, it does not appear to have large potential to address questions around solidarity and the reliance on a small number of member states to provide an EU-wide public good.

## CHAPTER 1 – INTRODUCTION

### I - Motivation

Border-free movement within the Schengen Area is among the most visible achievements of the European Union (EU) and is considered one of its most cherished benefits (Peter 2015). This free movement of people across borders represents a key pillar of the EU treaty and is seen as one of the most valued achievements of the European integration process, with the Schengen mechanism at its centre. As data from recent Eurobarometer polls highlights, almost a quarter of European citizens mention freedom of movement when asked what the EU means to them personally, while freedom of movement is mentioned as the second most positive result of EU integration, just after the creation of a secure peace (EC 2015h).

The unprecedented influx of asylum-seekers into the EU in 2015 has placed Schengen under considerable strain, with several member states re-introducing controls on parts of their internal borders, thereby suspending the functioning of the Schengen Agreement. Subsequent studies (auf dem Brinke 2016; Aussilloux & Le Hir 2016) have demonstrated that suspensions of Schengen are associated with considerable economic costs stemming from factors such as traffic delays and barriers to trade. In addition, these costs may represent only a subset of possible losses linked to an imperfect functioning of the Schengen Area, given that re-introducing border controls may have further social and political costs.

The European Parliament has commissioned RAND Europe to examine whether there are other types of cost associated with non-Schengen, with a special emphasis on civil liberties and home affairs. This study aims to contribute to discussions about Schengen's sustainability in the light of the migration crisis by identifying the costs of re-introducing border controls between Schengen member states in economic, social and political terms, and the potential benefits of more concerted action at EU level, compared to the lack of such action or action by member states on their own. The remit of this study includes both economic costs (such as the burden of re-introducing internal border controls) along with wider social and political costs (such as crime, and measures of security and trust). The focus on the latter types of cost reflects the fact that, as well as its economic benefits, Schengen has also been a building block of the EU's Area of Freedom, Security and Justice (Guild et al. 2010), and as such has an importance beyond the purely economic.

### II - Background and context

The development of the Schengen Area dates back to 1985 when five EU member states (Belgium, Germany, France, Luxembourg and the Netherlands) signed an agreement allowing for the gradual abolition of checks at their common borders. Five years later, the five countries signed a treaty implementing the Schengen Agreement which laid out the basis for the agreement's implementation (the Schengen acquis). The actual removal of border controls in the Schengen Area took place in 1995, almost ten years after the signature of the original agreement.

In the 1990s, the Schengen Area expanded to include every EU member state except the United Kingdom and Ireland, who maintain opt-ins.<sup>74</sup> Similarly, all the member states which joined as part of the 2004 accession wave (with the exception of Cyprus) have become members of the Schengen Area, although the newest member states (Bulgaria, Romania and Croatia) have not yet joined the system. Non-EU countries can also become members, with four (Iceland, Liechtenstein, Norway and Switzerland) having joined so far. Thus, the total current Schengen Area includes 26 countries, of which 22 are EU member states (EC, n.d.).

Initially, cooperation between the Schengen countries took the form of intergovernmental agreements outside the EU legal framework. Following the adoption of the Amsterdam Treaty, Schengen cooperation was incorporated into the EU acquis. Schengen governance arrangements were incorporated into the activities of the Council of the EU (Council of the EU 1991). The council subsequently determined which legal provisions constituting the Schengen acquis were to be incorporated into the EU legal framework,<sup>75</sup> and published these in 2000 (Council of the EU 2000b). Since then, the Schengen acquis has been further developed by subsequent legislative acts such as the Schengen Borders Code (SBC), adopted in 2006. The EU undertook a reform of the Schengen governance system in 2013. During this process, the Schengen Borders Code's provisions for temporary re-introduction of border controls at internal borders were amended (EU 2013)<sup>76</sup> and an evaluation and monitoring mechanism set up, charged with assessing the application of the Schengen acquis by member states (Council of the EU 2013a).

Importantly, the removal of internal border controls in the Schengen Area has been accompanied by a harmonisation of rules concerning the area's common external border.<sup>77</sup> This harmonisation includes common rules for conditions of entry (EU 2006) and short-stay visas (EU 2009b). In addition, in an attempt to balance considerations of freedom and security, a series of 'compensatory' (EU 2009a) measures were adopted by Schengen countries to strengthen police and judicial cooperation among participating countries.<sup>78</sup> The Schengen Information System (SIS) was established, followed by the introduction of its second generation version in 2013, enabling countries to share information about

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<sup>74</sup> The new Schengen countries were (year of signing the agreement in brackets): Italy (1990), Portugal (1991), Spain (1991), Greece (1992), Austria (1995), Denmark (1996), Finland (1996) and Sweden (1996).

<sup>75</sup> As Huybrechts (2015) points out, this step was triggered by the need to determine the legal basis for each part of the Schengen acquis in the new pillar system created by the Amsterdam Treaty. In addition, the council needed to identify Schengen provisions which had already been superseded by EU developments in the Justice and Home Affairs (JHA) area and were thus no longer relevant.

<sup>76</sup> The SBC was codified in March 2016 in the EU (2016a).

<sup>77</sup> These rules are codified in the aforementioned Schengen Borders Code. In addition, in 2006, the Commission published a *Practical Handbook for Border Guards (Schengen Handbook)*, intended as a tool for national authorities to help ensure a uniform execution of border control tasks (Council of the EU 2006).

<sup>78</sup> While not part of the Schengen Area, the United Kingdom and Ireland opted into Schengen's cooperation mechanisms (Council of the EU 2000a; Council of the EU 2002).

individuals and goods between relevant border, law-enforcement and judicial authorities.<sup>79</sup>

## 1. Current challenges to the Schengen system

The recent influx of irregular migrants and refugees to Europe<sup>80</sup> has put the Schengen system under considerable strain and has led to several Schengen countries re-introducing border checks on a temporary basis.

The possibility of re-introducing controls at internal Schengen borders is foreseen in the Schengen Borders Code, whose Article 25<sup>81</sup> lays out a general framework for the re-introduction of controls where there is a 'serious threat to public policy or internal security' in a given country. In such a case, the country may decide to re-introduce controls for up to six months, provided that the border controls represent a 'last resort' option and are temporary in nature (Guild et al. 2015). Article 26 of the SBC specifies the criteria for any member state's re-introduction of internal border controls, namely 'any threats to [member state's] public policy or internal security' and the likely impact of the re-introduction itself. Article 27 of the SBC further specifies the procedure for the re-introduction of border controls and lays out the pertinent notification requirements (giving at least four weeks' notice) in order to inform all relevant stakeholders including other Schengen countries, the European Commission, European Parliament and the Council of the EU.

For situations that necessitate immediate action, Article 28 of the SBC allows for short-term (up to ten days, with possible extensions) emergency action. In addition, Article 29 includes a provision for situations where 'the overall functioning of the area without internal border control is put at risk as a result of persistent serious deficiencies relating to external border control' and allows the re-introduction of border controls for a period of up to two years (an initial six-months period, followed by up to three six-month extensions). Importantly, unlike measures taken under Articles 25 or 28, re-introduction of border controls under Article 29 can take place based on a recommendation from the Council of the EU, which itself should be based on a proposal from the European Commission. Article 30 lays out the criteria to be taken into consideration with respect to any border control re-introductions made in accordance with Article 29.

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<sup>79</sup> For a more detailed description of Schengen's compensatory measures, see for instance Delivet (2015).

<sup>80</sup> The International Organisation for Migration estimated that the number of arrivals in Europe during 2015 exceeded one million people, and that the number of arrivals in the first two months of 2016 was much larger than that over the same period in 2015 (IOM 2015; IOM 2016).

<sup>81</sup> The numbering of SBC Articles in this report is done in accordance using the codified version from March 2016, which may result in discrepancies with older texts referencing the SBC.

**Table 1.1: Overview of SBC provisions dealing with the temporary re-introduction of internal border controls**

<b>SBC Article</b>	<b>Provision</b>
Article 25	Provides for temporary re-introduction of controls in response to a 'serious threat to public policy or internal security' (up to six months)
Article 26	Criteria for temporary re-introduction of controls under Articles 25 and 28
Article 27	Procedure for re-introduction of controls under Article 25
Article 28	Provides for temporary re-introduction of controls in cases requiring immediate action (up to two months)
Article 29	Provides for temporary re-introduction of controls in cases where the overall functioning of the Schengen Area is at risk (up to two years)
Article 30	Criteria for temporary re-introduction of controls under Article 29

In September 2015, Germany was the first country to resort to temporary measures under Article 28 and re-introduced controls at its border with Austria (Council of the EU 2015j). In November 2015, facing a deadline after which Article 28 border controls could not be sustained, Germany announced that it would keep controls in place under the provision of Article 25, thereby availing itself of an additional six months in order to maintain border checks. Austria followed suit shortly after the original German announcement and re-introduced Article 28 controls at its borders with Hungary, Italy, Slovakia and Slovenia (Council of the EU 2015i). As with the German case, Austrian controls were reclassified as Article 25 measures in November 2015. One day after Austria, Slovenia also announced the re-introduction of temporary controls at its border with Hungary (Council of the EU 2015k). However, unlike Germany and Austria, Slovenia terminated its temporary controls in October 2015 (Council of the EU 2015l).

Since the initial announcements in September 2015, several other Schengen countries (Belgium, Denmark, France,<sup>82</sup> Germany, Hungary, Norway and Sweden) have taken similar measures.

The temporary re-introduction of border controls in accordance with the provisions discussed above by Schengen countries is not necessarily an unusual development. In fact, countries have routinely made use of these, for instance in the context of high-profile events taking place in a given country or in response to serious public health risks.<sup>83</sup> However, the recent succession of individual countries invoking the relevant SBC

<sup>82</sup> France initially introduced temporary border controls in connection with a climate change conference in Paris held in November and December 2015. Following the November terrorist attacks in Paris and the subsequent declaration of a state of emergency, the already established controls were retained (Council of the EU 2015h).

<sup>83</sup> See, for instance, Carrera et al. (2011) and Groenendijk (2004).

provisions and continued 'serious deficiencies' with respect to external border controls in Greece (EC 2016b) has given rise to questions about the system's future.<sup>84</sup>

Various European Union bodies have clearly stated their commitment to preserving internal border-free movement (EP 2015b), notably in a Council Recommendation of 12 February 2016 describing steps to address deficiencies in external borders (Council of the EU 2016d) and in the EC's March 2016 communication on a roadmap for restoring a fully functioning Schengen system (EC 2016a). This roadmap outlined steps to be taken, mostly concerning improvements in Greece's ability to manage its part of the Schengen external border, resumption of Dublin transfers to Greece, and provision of assistance to Greece. The roadmap established a progress-monitoring schedule to help the EC determine whether the situation had improved sufficiently to avoid the invocation of SBC Article 29. In early May 2016,<sup>85</sup> based on reporting from Greece and its own assessment, the EC concluded that while substantial progress had been made by Greece, not all previously identified serious deficiencies in external border management had been sufficiently addressed (EC 2016n). As a result, the EC recommended that the Council of the EU issue a decision allowing member states to maintain internal border controls, albeit only with a limited scope and for a period of up to six months. The council adopted these recommendations in a 12 May 2016 Decision (Council of the EU 2016b).

## 2. Links between Schengen and other policy areas

From the perspective of the member states that have re-introduced temporary border controls since September 2015, the main challenge to border-free movement stems from factors external to the Schengen governance framework. This is well documented in justifications for the re-introduction of internal border controls submitted to the Council of the EU in line with the relevant SBC provisions outlined above. As summarised in Table 1.2, the most frequently cited reason is the uncontrolled influx of undocumented migrants and security threats. The aim of this paper is not to examine the legality or appropriateness of these justifications<sup>86</sup> but simply to note them as an expression of the political context in which member states have taken the decision to re-introduce internal border controls, and as a statement of member states' needs which must be addressed if there is to be a return to the normal functioning of Schengen. Therefore, a consideration of policy options to improve the functioning of the Schengen Area needs to take into account the Schengen framework as well as other policy areas, which is reflected in the scope of this study.

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<sup>84</sup> In this context, it is worth recalling a short-lived discussion to establish a mini-Schengen (limited to Benelux, Austria and Germany) floated by Dutch representatives in December 2015 (Guild et al. 2015).

<sup>85</sup> The timing of this assessment is set so that its results are known before the lapse of any border controls introduced by member states under Article 25 of the SBC.

<sup>86</sup> This aspect will be examined as part of a parallel paper completed by the Centre for European Policy Studies.

**Table 1.2: Overview of selected temporary re-introductions of internal border controls in Schengen countries since September 2015**

Country	Date of notification	Stated reason	Document ref.
Germany	September 2015	Uncontrolled influx of third-country nationals	11986/15
Austria	September 2015	Influx of third-country nationals	12110/15
Slovenia	September 2015	Uncontrollable migration flow	12111/15
Sweden	November 2015	Unprecedented migratory pressure	14047/15
Norway	November 2015	Unpredictable migratory pressure	14633/15
France	December 2015	State of emergency following November 2015 terrorist attacks	15181/15
Denmark	January 2016	Unprecedented migration pressure	5021/16

In addition to member-state notifications, this interconnectedness of policy areas is acknowledged both in official EU documentation and the academic literature. To illustrate, the latest EC report on the functioning of Schengen noted that 'although the asylum legislation is not part of the Schengen acquis, it is obvious that the refugee crisis has significant consequences for the situation at the EU's external borders and within the Schengen area' (EC 2015b, 3). Similarly, the EC report 'State of Play of Implementation of the Priority Actions under the European Agenda on Migration' notes that 'the Union's ability to maintain an area free from internal border control is contingent on having secure external borders' (EC 2016e, 13). Also, acknowledging the linkage between Schengen and police and judicial cooperation, the European Agenda on Security (EC 2015f) hails the Schengen Information System as one of the most important tools for law enforcement cooperation in the EU.

Put slightly differently, the current challenges to the Schengen system do not necessarily stem from inadequacies in the Schengen governance framework itself. For instance, Steve Peers (2015a) suggested that the current issues observed in Greece and the resulting Schengen suspensions are a product of deficiencies in the EU's asylum system rather than Greek border management per se. Similarly, Bertonecini and Vitorino (2016) argued that the Schengen Area, rather than contributing to the asylum-seeker crisis, was its 'collateral victim'. The need to address external factors in the interest of the Schengen Area is also acknowledged in the latest European Commission report on the functioning of Schengen, which noted that:

*addressing the two major challenges faced in the Schengen area — the refugee crisis and the terrorist threat — requires full and correct implementation of the measures already contained in the two sets of documents tabled by the Commission in spring [2015]: the European Agenda on Migration and the European Agenda on Security (EC 2015b)*

### 3. Role of trust and democratic legitimacy in the current challenge to Schengen

Given the importance of the political context in the re-introduction of internal border controls, the role of trust (or, more precisely, a breakdown thereof) needs to be acknowledged. This is applicable at two distinct levels: (1) trust between individual member states, and (2) trust between the public and national and EU institutions. The first dimension, trust among member states, represents the 'basis of Schengen cooperation' given that individual member states need to have confidence that their partners' policies and controls are adequate and similar enough to warrant the removal of internal borders (Pascouau 2012). However, as pointed out by Sinkkonen (2016), this type of trust has diminished, as demonstrated by 'blame games' over which member state has failed to uphold their obligations. This is echoed by Bertoincini and Vitorino (2016), who argue that the 'tension undermining the Schengen area is a result first and foremost of a crisis in trust among the member states'.

Public trust in institutions is the second dimension of the underlying issue. Trust in institutions across the EU had been decreasing with the continuation of the migrant crisis (Atwater 2015), which may reflect a general trend regarding confidence in governments' ability to address public concerns.<sup>87</sup> This trend is particularly relevant for EU institutions since, as numerous observers (Majone 1998; Scharpf 1999) have argued, there appears to be a link between effectiveness and legitimacy with respect to EU policymaking.<sup>88</sup> Pedersen (2015) argued that this may be particularly the case with respect to security policies. Using the example of the Schengen Information System (SIS) and Eurodac, he suggested that if the problem-solving capacity of these tools is encumbered, 'the legitimacy of the instruments and ultimately the Schengen agreements in their present form could be seriously endangered'.

Therefore, the breakdown of inter-member state trust and the lack of public trust in the EU's ability to uphold security and common migration and asylum policy need to be understood as a direct contributing factor to the political context that has led member states to re-introduce temporary internal border controls. This observation further underscores the point made above that policy initiatives aimed at reinstating Schengen to its full functionality need to extend beyond the Schengen governance framework.

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<sup>87</sup> The re-introduction of temporary border controls needs to be seen in this context. As Pastore and Henry (2016) noted, the very first re-introduction of border controls, by Germany in September 2015, represented a notable turnaround in German policy, prompted by a sudden spike in migrant arrivals in Bavaria not long after the German government's very welcoming initial stance.

<sup>88</sup> More recently, in a reference to the refugee crisis, Emmott (2015) observed that the purpose of the EU has come under question in relation to its inability to find a solution.

#### 4. Gaps in intra-EU solidarity as a factor contributing to trust breakdowns

Inseparable from the issue of trust is the notion of solidarity among member states, both in terms of respecting obligations to uphold common rules and in implementing financial and operational assistance schemes (Pascouau 2012). While member states have not always complied with their obligations under the existing Schengen migration and asylum acquis, it remains a matter of debate as to what extent these obligations were realistic to start with, particularly in light of recent migration volumes. A range of solidarity and assistance mechanisms has been proposed and, to a varying degree of success, implemented, in line with Article 80 of the TFEU (Treaty on the Functioning of the European Union) on solidarity and the fair sharing of obligations, including areas of border control, migration and asylum (EP 2015d). However, no information exists on how these assistance mechanisms compare to the overall needs of border countries and what resources these countries would need to fully meet their obligations under the current circumstances. Solidarity mechanisms require a small number of member states to provide at a disproportionate cost a service to the entire EU/Schengen Area, and the degree to which existing assistance mechanisms fall short of these countries' current needs remains an open question.<sup>89</sup>

To illustrate, the European Court of Auditors (ECA) conducted a review (ECA 2014) of spending under the External Borders Fund, which focuses on management of the external Schengen border. The review concluded that while the fund had contributed to financial solidarity among member states, it was impossible to determine its results and impact due to deficiencies in the relevant authorities' monitoring and ex-post evaluations. In response, the ECA recommended that member states develop measurable targets, coupled with progress indicators in terms of the fund's outputs, outcomes and impacts. Similarly, in 2016 the ECA published the results (ECA 2016) of an audit of EU spending related to migration in Southern Mediterranean and Eastern Neighbourhood countries. As with the 2014 report, this audit concluded that it was difficult to provide a measurement of the outcome of EU spending in this area and called for the implementation of a set of 'clear and measurable objectives'.

In addition to their design, at least some existing solidarity mechanisms appear to have been hampered by the lack of member states' participation and cooperation. One example is the current scheme for the relocation of asylum seekers. In September 2015, the Council of the EU issued two decisions introducing (Council of the EU 2015b) and subsequently amending (Council of the EU 2015c) a mechanism whereby asylum seekers would be redistributed to other Schengen countries.<sup>90</sup> However, shortly after the adoption of these

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<sup>89</sup> It is worth stressing that the issue of solidarity and burden-sharing is not a new question but one that has been posed many times before. See, for instance, EP (2010); Thielemann (2006), Thielemann (2008) and Eiko and Armstrong (2012).

<sup>90</sup> As Carrera and Guild (2015) point out, in addition to introducing a measure of solidarity, a related reason for the proposed relocation mechanisms was the failure of some member states to comply with their obligations under the Receptions Conditions Directive 2013/33

decisions, the possibility of forcing uncooperative member states into compliance came into question.<sup>91</sup>

Subsequent developments have largely confirmed these concerns. The relocation mechanism continues to attract strong opposition, particularly from new EU member states,<sup>92</sup> and in December 2015, Slovakia challenged the decision before the Court of Justice for the European Union (CJEU) (Vikarska 2015). Other countries, while not in principle opposed to the decision, have largely not come anywhere near fulfilling their share of relocations. Therefore, the numbers of actually relocated asylum seekers has lagged far behind the original plans and remains extremely low (EC 2016r).<sup>93</sup> In addition, in some instances relocated asylum seekers failed to stay in the country allocated to them and attempted to move to a different country (Lazarová, 2016). In light of these events, the scheme was considered a failure by various commentators as early as January 2016 (de la Baume 2016; Peers 2016a; Maiani 2016). Notably, the relocation mechanism is not the only scheme where member-state participation has fallen short of projected needs. Other examples include hotspots in Greece and Italy, which have been affected by a lack of seconded staff from member states (EC 2016e; Kaca 2016).

## 5. Economic, social and political costs resulting from imperfect functioning of the Schengen Area

The political context in which member states have re-introduced internal border controls also provides a good indication of what can be conceptualized as costs associated with gaps in the functioning of Schengen. Economic costs of various forms (e.g. direct administrative costs associated with the management of re-introduced borders, macro-economic costs stemming from disruptions to trade and travel, and so on) are an obvious category and have been discussed in existing literature.

Multiple studies have estimated the economic costs of the removal of Schengen border-free movement (also dubbed ‘the costs of non-Schengen’) with regard to trade, waiting times and impact on financial markets – see for example reports by the EPRS (EP 2016b), Jacques Delors Institute (auf dem Brinke 2016), EC (2016a) and France Stratégie (Aussilloux & Le

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to provide acceptable conditions for asylum seekers. For a discussion of the situation in Greece, see for instance HRW (2011).

<sup>91</sup> See, for instance, Peers (2015b). One of the underlying considerations being that while the EC could initiate infringement proceedings, this is a very lengthy process and at its end member states may prefer simply to pay the financial penalty. Interestingly, financial penalties were explicitly built into the new version of the relocation mechanism proposed by the EC in May 2016.

<sup>92</sup> The Czech Republic, Hungary, Romania and Slovakia voted against the Council of the EU Decision of 22 September 2015. The decision was passed using the qualified majority voting procedure.

<sup>93</sup> While engagement of member states (or lack thereof) seems to be one of the key factors, other underlying factors also need to be acknowledged. These include, among others, the administrative complexity of the scheme and its lack of attractiveness to asylum seekers. See, for instance, EC (2016v).

Hir 2016). These reports demonstrated that an abolishment of the Schengen agreement could have a detrimental impact on the European economy and its member states. However, these studies either did not consider the running costs of border re-establishment or included only a brief analysis of such costs based on an extrapolation of previous, often hardly comparable, estimates.

A more thorough analysis of a related topic can be found in another report published by the EC (2016c), which estimates the costs of ‘smart borders’ (modern self-service gates and kiosks) implemented at the external borders of the EU. Unfortunately, the report considers only changes to the running costs of existing external borders instead of looking at internal borders as well. Finally, yet another EC report (2016j) looks directly at the additional administrative and fiscal costs, suggesting that they would range from €0.6bn to €5.8bn annually based on a 1993 estimate of public administrative costs in the range of 0.1–0.2 per cent of the total value of intra-community trade, and on the EU standard-cost model for the reduction of regulatory burden from 2004 (EC 2004). Table 1.3 provides a summary of the various economic cost estimates.

In addition to economic costs, re-introducing intra-EU borders may have wider social and political costs. For example, Schengen is an integral part of the EU’s Area of Freedom, Safety and Justice (Guild et al. 2010) while the abolition of internal borders routinely ranks among the most popular EU achievements among general public (Peter 2015). It is noted that to ensure security within the border-free area, Schengen states have increased police cooperation to tackle organised cross-border crime and terrorism. Cross-border surveillance, hot pursuits,<sup>94</sup> the establishment of joint police centres and the SIS are particular examples of intra-Schengen cooperation.

Hence, the costs of non-Schengen may also be conceptualised by considering what Schengen was supposed to deliver. In addition to creating a border-free travel area, Schengen (and in particular its compensatory measures) was intended to result<sup>95</sup> – and according to some authors (Vitorino & Bertoncini 2015) may actually have resulted – in a more secure area. Therefore, it is possible that there are safety and security costs associated with non-Schengen which merit greater examination (Gros 2015). However, in light of recent migration waves and terrorist attacks some argue that border controls are essential to safeguard national internal security (Vasilopoulou 2013). The underlying reasoning behind this argument is that the lack of internal border controls may allow criminals and terrorists to operate in one country and hide in another, making legal prosecution and enforcement more difficult.

The majority of evidence is anecdotal, however, and there is only sparse empirical evidence – Pána (2011), for instance, highlighted that after the Czech Schengen accession in 2007 no

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<sup>94</sup> ‘Hot pursuits’ allow the police force from one Schengen state catching criminals in the act of committing serious offences to pursue them across borders and detain them on the territory of another Schengen state.

<sup>95</sup> Bertoncini and Vitorino (2016) argued that the original security dimension of Schengen has been played down in the recent debate surrounding the re-introduction of internal border controls.

overall significant increase in crime was observed. In Austrian and German border regions no increase in crime was reported; on the contrary, in some of the border regions overall crime levels even decreased. Pána (2011) also mentioned that one other change in the border areas was a decrease of prostitution due to the end of large queues at border crossings, which previously represented an opportunity for prostitutes to find clients. Ademmer et al. (2015) came to a similar conclusion by looking at German regions bordering the Czech Republic and Poland. This study looked at four German states (Mecklenburg-Vorpommern, Brandenburg, Saxony and Bavaria) bordering these two countries and examined how criminal activity had evolved in them after Schengen compared to non-border states. The idea was that these four states would have been adversely affected compared to non-border states, although the study findings suggested that while crime rates have generally decreased across Germany, criminal activity in German states bordering Poland and the Czech Republic in fact decreased relatively more over the period between 2006 (the last full year border checks were in place) and 2014. A similar pattern was observed when looking only at property crime, and while the results are merely descriptive (and the authors acknowledge that more in-depth analysis is required to shed light on causal effects), the findings at least suggest that the abolition of border controls may have led to a decrease in criminal activity in German states not bordering new member states.

In contrast to the studies above, McCabe (2015) looked at a different type of crime pursued by organised crime groups across Europe: drug trafficking. This study found a negative association between joining Schengen and a country’s volume of heroin seizures, suggesting that Schengen states intercept less heroin than they would as a non-Schengen state. The study examines cross-country differences and long-term trends in the quantities of heroin seized by comparing Schengen with non-Schengen countries. However, it does not compare the total volume of heroin seized by countries after joining Schengen to their pre-Schengen levels, which would have shed more light on the potential causality of this association. We investigate this point in more detail below.

Looking at political costs, the discontinuation of Schengen, particularly if seen as connected to the EU’s inability to uphold its migration and asylum policies, may contribute to losses in public trust in the European project or other areas of trust relating to national and international institutions (Heinrich Böll Stiftung 2016).

**Table 1.3: Overview of selected studies estimating the costs of non-Schengen**

Study	Methodology	Findings
Cecchini (1988). The European Challenge. Commission of the European Communities	Multinational survey of budgetary costs to public authorities in terms of material and human resources employed to carry out customs inspections, deducting cost associated with non-custom tasks.	European Currency Unit (ECU) 902m in six countries (Belgium, France, Germany, Italy, Netherlands, UK).
European Commission (2016a), Communication from the Commission to the	EU standard-cost model for the reduction of regulatory burden assuming €18.5 labour	Between €0.6bn and €5.8bn of administrative costs would have to be paid by

European Parliament, the European Council and the Council: Back to Schengen – A Roadmap	costs per hour and one billion passenger trips annually; Cecchini (1988) report findings – assuming public administrative costs of 0.1-0.2 per cent of the total value of intra-community trade	governments for increased staff for border controls.
EP (2016b), The Cost of Non-Schengen: Impact of border controls within Schengen on the Single Market	Costs of border-crossing points enhancement in seven countries financed by the ‘Schengen Facility’ fund, extrapolated to all Schengen countries using population ratios.	One-off costs of re-establishing all land border crossing points in all Schengen countries of €7.1bn.
auf dem Brinke (2016), The Economic Costs of Non-Schengen: What the numbers tell us. (Jacques Delors Institut)	Extrapolation of the costs to protect the US-Canadian border using border length ratio.	Operating costs (personnel and maintenance of border infrastructure) €1.6-2.7bn per year.

### III - Objectives and scope of this paper

Against this background, the current paper focuses on the ‘costs of non-Schengen’ from a civil liberties, justice and home affairs perspective. As outlined above, although recent literature has provided a good evidence base relating to the macro-economic cost of non-Schengen, there remains a gap in the evidence base concerning potential budgetary costs along with wider social and political costs. This paper aims to bridge that gap.

While social and political costs can take many different forms, we focus on those related to justice and home affairs, including crime, safety and security, and trust.

Additionally, given the likelihood of substantial costs associated with an imperfect functioning of the Schengen Area, this study seeks to identify the potential benefits of more concerted action at EU level which could enable Schengen to return to full functioning, with resulting benefits. In its analysis of policy options and areas requiring more concerted action at the EU level, the paper notes the political context in which internal borders were re-introduced and of the needs of the member states responsible. Therefore, in addition to the Schengen governance framework, the following external domains are also examined: external border control, migration and asylum acquis, and police and judicial cooperation.

In essence, this paper seeks to address two main research questions which can be divided into further sub-questions as follows:

- 1) What are the economic, social and political costs of the re-introduction of border controls in the area of justice and home affairs?
  - a. What are the budgetary costs of re-allocating public sources towards border control?

- b. What are the empirical associations between Schengen, crime and security?
  - c. What is the empirical association between Schengen and various modalities and levels of trust?
- 2) Would potential benefits result from more concerted action at the EU level within the current Schengen governance framework, or by external factors?

It is important to acknowledge the limited timeframe of this study, resulting in constraints on the paper's scope and level of detail. We could also have looked further into other areas of crime (such as human trafficking) related to border controls or the lack thereof, but due to the absence of existing quantitative data have not pursued that area of research.

#### IV - Research approach and limitations

A number of different research activities have been undertaken to produce this paper. Overall, we applied a mix of qualitative and quantitative methods including desk research and literature review, semi-structured interviews with different stakeholders, cost-modelling and econometric-modelling techniques. Our approach is as comprehensive as has been possible within the timeframe of this study, although a few limitations need to be highlighted.

##### i. Conceptual limitation: what is 'non-Schengen'?

An underlying conceptual challenge to this study is a lack of clarity concerning the most accurate description of 'non-Schengen'. A somewhat crude approach would be to imagine Schengen as a binary choice, i.e. either the Schengen Area and its provisions are in place for a given country, or they are not. This is the approach this paper takes for a subset of analyses owing to methodological and data considerations.

In reality, however, the spectrum of options is more complex, and the forms in which Schengen may function are more varied. For instance, based on the Council of the EU's decision of 12 May 2016 (Council of the EU 2016b), internal border controls are maintained by five countries. In each of these countries controls are carried out only at a subset of their respective borders and checks are intended to be targeted and limited in scope. However, future re-introductions of internal borders may be of a completely different scope. Furthermore, the duration of temporary controls can be subject to change, adding complexity to efforts at estimating their impact. The temporary nature of re-introduced border controls may make countries reluctant to make investments in longer-term solutions and arrangements, thereby relying on measures of a more stopgap nature. In estimating economic costs, this paper attempts to address this uncertainty and variation by introducing a series of sensitivity analyses.

In addition, even in the event of a discontinuation of the internal border-free area, it is conceivable that some Schengen compensatory measures and other related features would be retained. This applies particularly to the Schengen Information System, described by one interviewee as 'by far the largest cooperation system on the planet'. This poses a challenge for estimations based on comparisons with *status quo ante*, i.e. the situation before the establishment of Schengen or before a given country's accession to the area. Put

differently, one way of thinking about the costs of non-Europe is that they represent the opposite of EU added value. Viewed from this perspective, even in the event of a complete re-introduction of internal border controls in the Schengen Area, some EU added value stemming from the Schengen governance framework is likely to be retained, such as in the form of improved law-enforcement cooperation. It is therefore unlikely that the costs of complete non-Schengen would equal the totality of Schengen's EU added value.

## 1. Methodological limitations

The study was undertaken in a constrained time-span which determined the extent of the analysis. For instance, the cost-modelling approach applied in this paper is based on relatively scarce data and assumptions had to be made throughout the modelling process to extrapolate and/or aggregate missing input data for a wider set of countries. With more time available more data points could have potentially been collected. Nevertheless, we have clearly highlighted all assumptions made and, in line with good practice, provide a range of cost estimates based on sensitivity analyses.

In addition, the report uses data on criminal activities. Such data comes with caveats and is not always available at all geographic levels of analysis (e.g. country or regional level) over a longer period of time. This has to some extent determined the empirical analyses conducted in this paper. It is also important to note that all empirical estimates in this paper should be interpreted as associations rather than causal effects. The specific limitations of the empirical approach taken in this paper are discussed in the relevant sections of chapter 2.

## 2. Limitations of policy assessments

EU institutions have been very active in the past two years as far as policymaking in Schengen-related areas is concerned. Relevant examples range from the adoption of documents setting out broad policy direction (such as the European Agenda on Migration and its security counterpart) to concrete legislative proposals (such as the proposal to establish the European Border and Coast Guard) along with the development of tools to complement existing policies (such as common risk indicators). These recent undertakings are currently in various stages of their policy life – some are still under consideration while some are in the early stage of implementation. This poses several challenges for an analysis of their impacts. In the case of recently implemented initiatives, there may not be enough evidence available. For initiatives that are currently under consideration, their final form – which itself may vary substantially from the initial proposal – may not have been agreed on. In addition, while some policy proposals have been accompanied by an impact assessment, as Malmersjo and Remáč (2016) noted, this is by no means a universal occurrence.

## V - Structure of the paper

This research paper is structured as follows:

- Chapter 2 aims to quantify the economic, social and political cost of non-Schengen from a home affairs and civil liberties perspective;

- Chapter 3 examines different options where action at EU level could lead to beneficial outcomes compared to the current state of play;
- Chapter 4 provides a report summary and conclusions.

## **CHAPTER 2 – QUANTIFYING THE COSTS OF NON-SCHENGEN IN ECONOMIC, SOCIAL AND POLITICAL TERMS: A HOME AFFAIRS AND CIVIL LIBERTIES PERSPECTIVE**

### **I -Analytical approach**

As outlined in chapter 1, the goal of this paper is to add to the existing evidence base on the potential economic, social and political costs of ‘non-Schengen’ – or, in other words, what Europe could lose by reversing the current internal border-free zone within the Schengen Area.

With regard to economic costs, this study focuses on the potential costs of physically rebuilding borders between Schengen states. In principle, these costs can be divided into direct and indirect (opportunity) costs, which can in turn be further differentiated by the type of affected subject. To that end we apply a cost-modelling approach taking into account information from a variety of sources.

Concerning social and political costs, we use econometric-modelling techniques to investigate the association between Schengen and different types of crime, including acquisitive and violent crime, as well as the illicit drug trade. We also explore associations between Schengen and different measures of trust, including interpersonal trust and trust in national and transnational institutions. For potential social and political costs we examine both cross-country and within-country trends and changes by comparing border and non-border regions. Specific analyses are outlined in more detail below.

### **II - Economic costs: direct budgetary impact of re-introducing internal border controls**

#### **1. A cost-estimation approach**

In order to calculate the potential budgetary costs of re-establishing border controls we use a bottom-up cost-modelling approach, breaking the total expected costs down by type of expense (one-off fixed costs and operating costs), attaching a value to each category and country, and summing those up to provide a total estimate. Each individual estimate is calculated using either country-specific parameters or appropriately modified parameters from other countries. Although more complicated and demanding than the alternative (i.e. a top-down cost estimation based on dividing total expenditure by total units of activity), a bottom-up approach is more transparent and versatile, and facilitates use of the analysis in different scenarios (Cabinet Office, n.d.). Moreover, a top-down approach is infeasible in our study to start with due to lack of data on the total costs of border protection at country level.

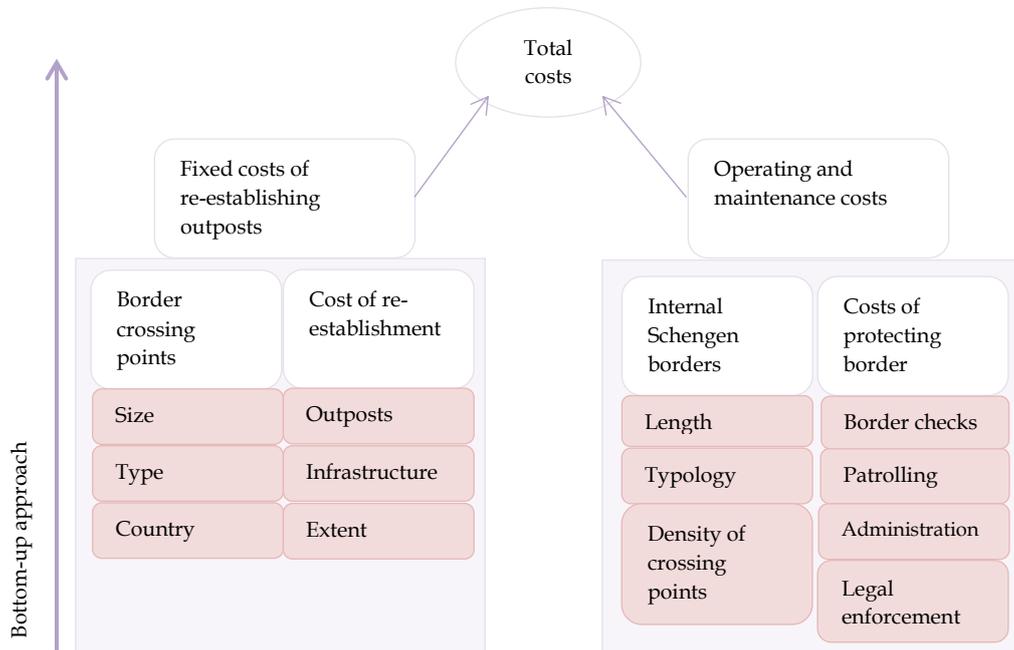
In essence, the direct budgetary costs of re-introducing border controls can in principle be divided into two categories depending on their re-occurrence and dependency on other factors (see Figure 2.1):

1. **Fixed costs** of setting up or reconstructing border crossing points, including building new checkpoints, refurbishing older unused outposts, purchasing computers, scanners, and other IT equipment, developing supporting IT infrastructure, purchasing personal equipment for border force officers, patrol vehicles, related infrastructure, and project management and training for new border-force employees. We assume that fixed costs are a function of country, border-outpost size, type (air/land/maritime) and total number, as depicted in Figure 2.1. That is, establishing a border outpost will: (1) generally be more expensive in richer countries, particularly due to higher prices and also possibly more expensive equipment used; (2) will depend on outpost size and intended traffic capacity; and (3) will be more expensive for land border outposts that need to be completely refurbished or wholly rebuilt compared to air and maritime borders (see below). Total costs will be the sum of expenses required to re-establish each individual border outpost.
2. **Operating, patrolling, administrative and maintenance costs** of day-to-day border controls, consisting principally of border-force salaries, equipment maintenance, fuel, law-enforcement activities and administrative expenses such as visa checks. As with fixed costs, operating costs will mainly depend on the number, type and size of border crossing points, as well as on the length and type of the border itself. Every border outpost requires border agency officers and infrastructure maintenance, but borders with a lower density of border outposts are more expensive to patrol. There are also substantial costs related to law enforcement and administration. Again, richer countries are more likely to see higher expenses per border outpost or 100 km of border length.

In the following we do not consider potential increases in the costs of processing visas as it is difficult to estimate the number of additional applications, while countries may have existing capacity to cover any increases in demand. In addition, there are no national data on the extent to which processing costs can be recovered through user fees and it is possible that all costs would be covered this way.

In principle, one-off fixed costs are related mainly to the number of border crossing points and their location, type and size, whereas operating costs depend more on the number of border-force employees and border crossings, or on the length and structure of land borders (Figure 2.1). Unfortunately, the theoretical model cannot be fully reflected in the calculation due to data limitation, particularly the lack of a detailed cost breakdown. In the following, we first introduce variables relevant for both cost categories, discuss their calibration at the national level, and subsequently calculate estimated direct budgetary costs in two proposed scenarios.

Figure 2.1: Cost-estimation diagram



It is important to stress that estimating the budgetary costs of reversing the Schengen Agreement is difficult due to the shortage of detailed data (e.g. the lack of a land border crossing points register as a result of absent internal border controls), the diversity of possible scenarios, and methodological limitations. To that end, any predictions are by definition uncertain. In order to diminish the degree of uncertainty we provide a range of estimates for a set of different scenarios complemented by sensitivity analysis. That is to say, scenarios serve to identify the main possible paths of future development (for example either the permanent re-introduction of borders or just a time-limited alternative) while sensitivity analysis works with the underlying parameters and induces variation within each scenario to provide information on the effect of a change in parameter estimates on the resulting costs.<sup>96</sup>

Below we discuss how we calculate the different cost elements as outlined in Figure 2.1 to obtain the total costs of re-establishing borders in the Schengen Area.

## 2. Border crossing points

In order to assess the costs of re-establishing borders it is important to discuss first the different types of borders.

<sup>96</sup> This may be illustrated by looking at the time required to perform a passport check. A European Commission (2016j) report suggests that checking travel documents takes between 1.5 and six minutes per passenger for all modes of transport, while for each lorry between four and 16 minutes is needed to perform the document check and a cargo inspection. Depending on the value chosen, the upper bound on the estimate can therefore be up to four times higher than the lower bound.

The internal borders within the Schengen Area, i.e. borders between two countries that are both parties to the Schengen Agreement, are open and unguarded. There are in principle no officers present even at border crossing points (i.e. official locations of entry into another country), even though this may vary by country size/importance of the particular crossing point. Either way, border-force officers do not carry out border checks regardless of travellers' country of origin. Schengen states are required to remove all obstacles to the fluid movement of road traffic, and while police and security checks may still be carried out, they must be on the basis of police information about possible threats to public security or suspected cross-border crime, or only to verify a person's identity, respectively (EU 2006). (Norway, Switzerland and Iceland are in the Schengen Area but not in the EU, and therefore have customs controls in effect for all arriving travellers, regardless of point of origin.)

In the event of reversing the Schengen Agreement, some/all internal borders would need to be patrolled again, depending on the particular agreements among European countries, and a vast network of border posts would need to be re-established around the continent to check identity and the travel entitlements of people wishing to move from one country to another. Importantly, since most border posts along internal borders have been closed (and some completely removed), this would come at a significant cost to the countries concerned.

By contrast, the external borders of the Schengen Area, i.e. borders between Schengen and non-Schengen countries, are guarded and the participating countries are required to apply standardised strict checks on travellers entering and exiting the Schengen Area. The checking procedures are outlined in Regulation (EU) 2016/399; we use these procedures as an average standard in our forward-looking analysis. That is to say, should border checks be reinstated we assume that they would be procedurally similar to those currently taking place at external Schengen borders in terms of their scale and scope. In other words, all travellers would be subject to at least a minimum check of their identity and the expiry date and authenticity of their travel documents.<sup>97</sup> Additionally, border officers might investigate signs of document falsification or counterfeiting as well as consulting (inter)national databases to ensure that the traveller does not represent a threat to the country. Depending on whether they were entering or exiting the country, third-country nationals might also need to show an appropriate visa/residence permit if required, inform the officer of the purpose of their stay, point of departure and destination, and provide proof of sufficient funds to cover their stay. Given the variation in the procedures required, average processing times might differ substantially.

Another way of differentiating between borders is according to their geographical location, where we distinguish between land borders (including natural sweet-water borders such as rivers or lakes), air borders, and sea borders. Only land borders can be considered

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<sup>97</sup> Border-check procedures governed by national law rather than Schengen-wide directives may be less strict in their requirements to check all travellers, resulting in the practice adopted by many European countries before border controls were stopped whereby border agency officials allowed barrier-free transport for some individuals based on their professional judgement.

internal or external as air and maritime borders are open to any plane/ship in a virtual sense, regardless of their country of origin. Hence, air and maritime borders in all Schengen countries are continuously guarded<sup>98</sup> and while there are separate areas to process individuals travelling within the Schengen Area, these borders would not need to be substantially transformed if the Schengen Area was abolished.

Finally, we may distinguish border crossing points on the basis of the volume of traffic passing through them. According to an EC report (EC 2016c), approximately seven per cent of the total 1,800 border crossing points in selected EU member states is defined as a 'large' border crossing: 40 sea border crossings, 27 air border crossings, 40 land border crossings, and 20 railway connections linking Schengen countries. Moreover, 70 per cent of travellers are estimated to use these large border crossing points. In our study, we further distinguish 'medium' and 'small' land border crossing points. The three categories would roughly correspond to, for example, French–Belgian border crossing points between Roubaix and Kortrijk (large), Bercu and Crinquet (medium), and at Oost-Cappel (small).

In order to estimate the overall costs of re-introducing borders within the Schengen Area, a list of border crossing points in operation before Schengen was established (or potential outposts should it be abolished) would be needed. To the best of our knowledge, there is no such official and complete list of historic and/or potential border crossing points publicly available. We therefore used a European Parliament regulation<sup>99</sup> to establish a list of internal border crossing points for the Schengen countries. This document contains detailed lists of border crossing points for all countries that joined the Schengen Area in 2007 or later (note that Liechtenstein is only reported as a part of Switzerland<sup>100</sup>) as well as the air and maritime border crossing points of all other Schengen countries as reported by national officials. As of May 2016, there were an additional 45 updates to the original document from 2006, mostly relating to the addition/removal of air or maritime crossing points.

Unfortunately, it seems that while some countries reported a full list of official routes, others arguably reported only those above a certain level, neglecting local border traffic and tourist crossing points. What is more, neighbouring countries sometimes provide different lists of crossing points; for instance the Czech Republic lists 100 crossing points on its border with Poland, whereas Poland lists 109. To deal with these inconsistencies we apply the principle of prudence, taking the lower of the two numbers to obtain a lower bound for the overall cost estimate. In addition, in order to make a clear distinction in the analysis we assume that unless a subset of the listed border crossing points is explicitly labelled as official local or tourist points (e.g. using a note next to the crossing's name), only

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<sup>98</sup> For simplicity, we assume that all airports, airfields, and aerodromes listed in the official documentation (see below) as air borders are open to planes coming from within and outside the Schengen Area. Even though there may be some small airports open to internal Schengen flights only – and thus not necessarily guarded – these would not significantly affect the results of our analysis.

<sup>99</sup> List of border crossing points referred to in Article 2(8) of the EP Regulation (EU, 2006).

<sup>100</sup> Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia and Switzerland.

‘standard’ crossing points are reported. To reflect this in the analysis, all explicitly defined local border traffic crossings and tourist crossing points are excluded from the calculations to establish consistency across countries.<sup>101</sup>

To test the appropriateness of our approach, we picked an example and manually analysed the Austrian border (see Appendix for details). Our findings shed additional light on the issue; in the European Parliament regulation, Austria lists 16, 19, 3 and 16 border crossing points with the Czech Republic, Hungary, Slovakia, and Switzerland (including Liechtenstein) respectively. Those numbers are much lower than our findings of 69, 33, 10 and 22. However, when we looked at Slovenia, the 21 regular border crossing points and 31 local border crossing points reported in the official document (EU, 2006) exactly match the 52 crossing points determined during our map investigation, suggesting that the other numbers of Austrian border crossing points (which do not explicitly mention local border traffic and tourist crossing points) exclude crossing points below a certain threshold, which is also the approach taken in our analysis.<sup>102</sup>

In addition, we use the recent border closures by Austria and France and the related reports (Council of the EU 2015f & 2015g) listing all newly introduced border controls to see how they match those listed in the 2006 European Parliament documentation and to provide us with new information on, for example, border crossing points between France and Belgium which was not available in the other documents. Arguably, the recently established border crossing points are the same as those that would be re-established should the Schengen Agreement be abolished. Indeed, recently opened borders (such as the one between Austria and Hungary) would likely have more or less the same number of crossing points as before 2007, even though their distribution as regards to size is slightly different in the 2006 and 2015 documents, possibly due to various road extensions. However, looking closely at the data we can see that, for example, the French–Belgian border has substantially fewer actual crossing points than one may have expected.<sup>103</sup> It is possible that the French authorities deliberately reduced the number of crossing points in order to cut the costs of protecting the border and to integrate border controls into as few nodes as possible, but this may eventually be the case in all countries. Either way, the lower number of border

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<sup>101</sup> Local border traffic crossing points can only be used by residents of the border area and are generally in remote places not accessed by other travellers. Similarly, only minimal volume of traffic leads through tourist crossing points. We therefore argue that such crossing points may not be guarded at all or would only require negligible investment in comparison with total costs. In line with the principle of prudence, we leave them out of the calculations, giving us a lower bound on the total costs estimated.

<sup>102</sup> In addition, the recently published list of border crossing points re-established in response to the ongoing migrant crisis (see below) distinguishes four levels of border crossing points. Although there are some discrepancies (arguably due to reconstruction of individual communications), only level 1–3 border crossing points seem to be included in the older documentation, again suggesting that the smallest border crossing points were previously excluded.

<sup>103</sup> Indeed, small roads cross the 620km-long border every few kilometres but there are only 18 officially accessible border crossing points listed in the documentation, i.e. 2.9 crossing point per 100 km – far lower than the average 5.96 across all countries with known crossing points (excluding local border traffic and tourist-only border crossing points).

crossing points is in line with our principle of prudence and where double records exist (e.g. the French–Swiss border) we use the newest data only.

The next step in our analysis employs statistical methods in order to estimate the number of land crossing points between countries that joined the Schengen Area prior to 2007 and for which we therefore do not have any official data. Specifically, we created a dataset consisting of all known land border posts (countries that joined Schengen in 2007, plus Austria and France), border lengths, type of terrain (lowlands, highlands, mountains) and controls for natural borders (particularly rivers which decrease the number of crossing points per 100 km), and determined what the number of crossing points between any two Schengen countries would be based on existing observations, given the length of their mutual border, its specifications, and the average number of crossing points per 100 km for such a type of border (see the Appendix for technical details).

Finally, border post re-establishment costs depend on the extent of work to be done and whether there are substantial cross-country differences in the status of land border crossing points that need to be taken into account. A substantial randomized online search based on checking satellite pictures of border crossing locations showed that there are essentially no longer any posts on borders between countries that joined the Schengen Area prior to 2007. For instance, looking at the French–Belgian border, not only there are no functioning posts, but there are not even buildings that would somewhat resemble them, either on large or small roads. By contrast, in other parts of Schengen, traces of former border infrastructure survive. The Haparanda–Tornio border crossing (one of the few Swedish–Finnish crossing points on the Torne River), for example, has an old customs building on the Finnish side but no infrastructure for regular checks of individuals and vehicles. Similarly, looking at the Czech–German, Polish–Slovakian and Latvian–Lithuanian borders we discovered that car gates and border-force officer booths have often been demolished, although some of the infrastructure – roads and buildings – remain.<sup>104</sup> A European Commission report (2010) supports our findings, stating that obstacles to fluid traffic flow (such as buildings, control booths, roofs over the road and mobile equipment) would be dismantled gradually following their country’s entrance into the Schengen Area, but that the process might take a long time due to various property-rights constraints, plans for future refitting and so on, noting that countries which had joined the Schengen Area in 2007 or later have had difficulties adjusting their borders accordingly.

### 3. Costs of (re-)establishing and running border crossing points

Lack of reliable data presents a major difficulty in analysing both fixed and operating costs. Again, very few countries in the Schengen Area have working land borders which might serve as a basis for calculations, there are no international statistics available on the subject, and national authorities rarely publish any data, resulting in very little information being available. Even where data exist, border agency budgets are not broken down into sufficiently detailed categories or locations and the staff responsible are unable to provide

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<sup>104</sup> For instance, looking at the Latvian–Lithuanian border crossing point near Kurpalaukis and Grenctāle, we can clearly see the whole outpost next to the highway.

additional data. For instance, we obtained the projected 2016 Latvian border agency expenditure but were unable to distinguish between the costs of protecting the external land border with Belarus and Russia and the maritime border, as the Latvian officers responsible informed us that they did not have the information themselves. In what follows we discuss our approach in dealing with this lack of data.

### 3.1 Operating costs

There is no reason to believe that processing and maintenance costs would substantially and systematically differ from one outpost to another within the same country. Border-force officers are state employees and as such are likely paid a similar wage, possibly adjusted for local discrepancies in price levels; similarly, the cost of new equipment and servicing is more or less equal within individual countries. The opposite is true for inter-country comparison where various other factors, particularly average salary, income tax rates and employment levels come into play. This is reflected, for example, in the Organisation for Economic Co-operation and Development (OECD) comparative price levels,<sup>105</sup> a purchasing power parity (PPP) index which shows that to buy the same bundle of goods, people in Switzerland, the most expensive country in the dataset, must pay 29 per cent more than in the UK and 142 per cent more than in Slovakia. Consequently, assuming that re-establishment and operating costs would be equal in all countries, adjusting only for currency exchange rates, would lead either to understating costs in rich countries, overstating costs in poorer countries, or both. We therefore use OECD comparative price levels to obtain national cost estimates.

Overall, only one (Finland) out of a potential 12 Schengen countries with external land borders provides a publicly available detailed breakdown of border maintenance costs.<sup>106</sup> These confirmed 2013 data show that Finland spent €103m on border controls alone, employing 1,119 officers and performing 17.8 million border checks across all external air, maritime and land borders. These numbers correspond to the official data on external border crossing statistics,<sup>107</sup> which depict an increase in external border traffic (and a decrease in internal border traffic) up to the same number of approximately 17.8 million external border crossings in 2013, out of which approximately 10.6 million were passengers with visa requirements. In addition, 1,232 border force officers patrolled the external borders, costing €113m. The figure also includes staff salaries, capital expenditure, technical supervision and assistance services.<sup>108</sup> Unfortunately, Finland is an exceptional

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<sup>105</sup> Available at <http://stats.oecd.org/Index.aspx?DataSetCode=CPL>. The monthly comparison reflects amount of money that must be spent in each country to purchase a comparable bundle of goods consumed regularly by households, such as products for everyday needs (food, clothing, cars, rents, personal services), products provided by the government, and payments to the government for licences and permits.

<sup>106</sup> Available from the Finnish open data service website, <http://budjetti.vm.fi>.

<sup>107</sup> Available at <http://www.findikaattori.fi/en/105>.

<sup>108</sup> Inflation in Finland, as measured by the consumer price index, was 0.8 per cent during 2013–2016; applying this to the estimates we obtain €105.5m and €115.7m for border check and patrolling costs respectively, as the actual 2016 price adjusted estimates used in our analysis.

example in several ways. In particular, the Finnish–Russian border goes through mostly uninhabited territory with a high degree of natural vegetation and a low number of permanent border crossing points. It would therefore be inappropriate to use the Finnish data as a basis for cost extrapolation to other countries, and in the following we apply the Finnish data only to Sweden and Norway, which have borders very similar to the Finnish–Russian one.

To circumvent the issue, we further use data from Switzerland<sup>109</sup> and Latvia.<sup>110</sup> Both countries report overall expenses related to border protection only, preventing a detailed analysis. Nevertheless, based on their description of respective border agency responsibilities they include essentially the same items (such as maintaining border outposts, controlling passengers, border surveillance, capital expenditure, patrolling costs and administrative and maintenance costs), and can thus be compared and used as a basis for extrapolation to other countries using a common denominator.

The EPRS report (EP 2016b), one of a very few comparable studies that endeavours to estimate the budgetary costs of re-establishing borders, applied population size as the common denominator used to extrapolate country-level costs. We argue that this approach is subject to substantial limitations, particularly due to the weak link between population size and border length, typology, number of border crossing points and their size, which constitute the main factors in determining the overall expense of maintaining land borders. Alternatively, the report by the Jacques Delors Institut (auf dem Brinke 2016) uses border length to extrapolate the estimated costs of protecting the US–Canadian border with the Schengen Area. However, this approach does not take into account the fact that there are only 119 open land border crossing points (including Alaska) at the US–Canadian border, many of which are in sparsely populated areas completely different geographically from the European landscape. By contrast, we estimate that the internal Schengen border, although only a little less than twice as long, would have over 1,500 border crossing points, i.e. over 12 times more than the US–Canadian border.

A possible alternative common denominator is the volume of passenger crossing country borders, although needless to say, abolition of border checks has significantly complicated monitoring border-crossing statistics, particularly at land borders. Frontier countries such as Finland, Poland or Hungary have up-to-date statistics on external border crossings that are further reported to the European authorities, and the number of passengers using rail, air and water transport can be deduced either from data provided by transport companies or from various other security checks required prior to boarding train/aircraft/vessel. However, the lack of any border controls at roads, combined with the popularity of car and coach transport, creates a substantial gap in the data. Moreover, European countries did not have the obligation to publish any data on border crossings prior to joining the Schengen Area, resulting in extremely sparse historical data. Hence, we refrain from using passenger flows as the common denominator, although we use them – together with per-passenger cost estimates from the UK – to provide cost estimates for Greece, Iceland, and Malta, which do not have any land borders with other Schengen countries (see Appendix

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<sup>109</sup> Swiss Federal Finance Administration, [www.efv.admin.ch](http://www.efv.admin.ch).

<sup>110</sup> Latvian State Border Guard, [www.rs.gov.lv](http://www.rs.gov.lv).

for a description of the methodology). We also use a weighted average of both estimates (using land border crossing points and passenger flows) to determine cost estimates for Denmark and Estonia. These countries are unique in having a high share of passengers travelling by maritime transport; the expenses stemming from additional passenger checks would thus be significantly under-represented using only the main methodology based on the number of land border crossing points.

In what follows we take the approach that the number of border crossing points is the most appropriate common denominator, and therefore use it in our cost modelling. Not only does this approach explicitly link costs to actual border outposts and their size (and therefore indirectly to passenger flows) but also implicitly connects to border length through our estimation of border post counts using border length and typology. In other words, a cost estimate per border crossing point contains information on salary and outpost maintenance expenses as well as border surveillance, making it the most reliable basis for extrapolation.

Using this approach the estimated costs of protecting land borders are €1,283,752 per border crossing in Switzerland, €1,786,187 in Latvia, and €11,045,924 in Finland (PPP adjusted, see Table 2.1 and further details on the calculation in the Appendix). As expected, the Finnish estimate is higher due to the lower density of crossing points along the Finnish–Russian border. We then combine the Swiss and Latvian estimates into an average estimate of €1,534,970 to be applied for all but the Scandinavian countries. To account for a possibly large margin of error due to inter-country heterogeneity, we complement the estimates by sensitivity analysis in range of  $\pm 25$  per cent around the point estimate. The resulting estimates are shown in Table 2.1.

**Table 2.1: Operating costs estimates**

Base country	Cost per border crossing point	To be applied in
Finland	€11,045,924	Scandinavia
Switzerland and Latvia	€1,534,970	Other Schengen countries

### 3.2 Fixed costs of border re-establishment

As described earlier, we assume that only land borders would require substantial capital investment, as these would need to be refurbished or completely rebuilt, unlike air and maritime borders, which are already operating and would mainly require additional staff and equipment. According to responses in a note from the Council of the EU (2009b), the average passenger processing time at the external Schengen border was 0.5–2.5 minutes for passengers without visa requirements and 1–5 minutes for passengers with visa requirements, with Italy and Norway having the fastest and slowest controls, respectively (with slight variation between entry and exit checks).

Unlike road transport, air and maritime transport is well documented in the official statistics. Eurostat<sup>111</sup> data show that 216.9 million passengers travelled by air and 49.8

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<sup>111</sup> <http://ec.europa.eu/eurostat>

million by sea between Schengen countries in 2014. The detailed distribution is shown in Table 2.2.

**Table 2.2: Total (entry and exit) air and maritime passenger transport between Schengen countries**

Country	Air transport	Maritime transport
Austria	14,693,529	-
Belgium	17,620,675	3,000
Czech Republic	6,208,805	-
Denmark	15,457,168	21,769,000
Estonia	1,341,592	9,247,000
Finland	9,337,784	17,052,000
France	45,354,871	25,000
Germany	79,226,099	11,348,000
Greece	17,997,894	1,570,000
Hungary	5,356,101	-
Iceland	528,961	1,000
Italy	51,984,923	3,502,000
Latvia	2,665,568	677,000
Liechtenstein	-	-
Lithuania	1,992,406	279,000
Malta	2,475,556	305,000
Luxembourg	1,595,481	-
Netherlands	26,241,334	2,000
Norway	8,305,820	5,930,000
Poland	11,926,824	1,657,000
Portugal	16,358,715	-
Slovakia	653,175	-
Slovenia	600,758	14,000
Spain	72,062,493	362,000
Sweden	15,671,085	25,924,000
Switzerland	8,037,939	-
<b>Total</b>	<b>433,695,557</b>	<b>99,344,000</b>

Source: Eurostat (avia\_paincc and mar\_pa\_qm databases).

Assuming opening hours from 6am to 12pm every day of the year and 533 million entries/exits by passengers travelling by air and water transport in 2015 (i.e. 267 million passenger trips per year or 731,500 passenger trips per day), nearly 41,000 passengers would need to be processed every hour. Using detailed calculations based on the number of existing air and maritime border crossing points and national statistics on passenger traffic, 12–35 additional officers would need to be present at major airports and 4–10 at

major ports to process passengers travelling within the former Schengen Area.<sup>112</sup> Finally, following the European Commission report (EC 2016c), we assume that other 'small' crossing points would require two officers at any time.

For simplicity, and in line with the EC report, we assume that each officer requires a personal computer, passport scanner, fingerprint reader and equipment for taking facial images. An overview of the assumed costs is shown in Table AB.4 in the Appendix. Given all the facts, we assume fixed costs at large air and maritime borders, excluding any reconstruction of Schengen Area lanes, project management, additional IT infrastructure, officer training and peak-time backups to be in range of €92,000–294,000 and €53,900–154,000 for airports and ports, respectively. Because the resulting costs are negligible in the summary, we use these estimates to show the magnitude of any such changes rather than to provide an exhaustive list of all possible related expenses.

In addition to the updating costs of land and maritime borders we attempt to estimate the costs of re-establishing land borders. Following on from the discussion in the previous section, we assume that all land borders opened as a result of the 2007 and later Schengen enlargements later would not need to have their border posts completely rebuilt but rather refurbished and re-equipped. Since it is difficult to estimate the extent of such reconstruction, we assume that the costs of refurbishment would be 40–60 per cent lower than the cost of building a new outpost of the same size.

Given the lack of any appropriate European data, we use available information on the costs of similar US projects instead. In particular, we collected data on three US–Mexico land border crossing points in Calexico, CA, Columbus, NM, and Laredo, TX. Although two of these (Calexico and Laredo) are mainly reconfiguration and expansion projects, budgets range from \$68m to \$370m, i.e. in line with unofficial statistics from Europe.<sup>113</sup> Using more conservative figures, we believe that costs would be in range of €80–200m per large border crossing.

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<sup>112</sup> Specifically, there are 810 ports and 617 airports in the reporting countries (Liechtenstein does not have any airports), out of which we assume that 15 per cent are major crossing points (based on the distribution of regular airports and aerodromes in our dataset) processing 70 per cent of all passengers as per the European Commission (2016c) report quoted earlier, giving us an average of 3,152,631/8,637 passengers to be processed each year/day at major airports and 1,351,227/3,475 at all major ports. Note that there is large variance in the data across individual crossing points and countries. As a sanity check, we consider the Czech Republic with 18 listed airports, i.e. approx. 3 major airports according to our assumptions. The largest airport, Václav Havel Airport in Prague, clears more than 11 million passengers for departure each year, while the second largest airport, in Brno, clears less than 500 thousand passengers per year, with both figures including flights to all destinations. Overall, the numbers are therefore in line with our results.

<sup>113</sup> The German–Czech border crossing at Waidhaus–Rozvadov cost over CZK 1.1bn in 1997, i.e. approx. US \$35m in 1997 prices and US \$52.9m in 2016 prices. Data taken from iHned.cz (1997).

To approximate the costs required to build a medium-size outpost, we use public tender on the construction of border crossing point in Bijaca, Bosnia and Herzegovina (EC 2014), valued at €4.932m, and a report published by the Estonian Ministry of the Interior on the reconstruction of the Ivangorod–Narva border crossing points on the Estonian-Russian border (EstLatRus, n.d.), costing €8.221m. Accounting for lower purchasing parity levels in these countries, we therefore assume a medium-size outpost to cost on average between €5m and €10m to build.

Finally, small outposts are the most difficult to measure due to their heterogeneity and lack of data. To partially reduce the heterogeneity, we exclude local traffic and tourist crossing points from our analysis, providing a conservative estimate of the total costs. Based on the medium-size estimate and our expert opinion, we consider the costs to build a small border outpost to be between €100,000 and €400,000, which is likely to be far below the actual figures and therefore in line with our principle of prudence. The summary of fixed costs related to land borders can be found in Table 2.3.

**Table 2.3: Re-establishment costs of land border crossing points**

Size of border crossing point	Estimated unit cost
Large	€80–200m
Medium	€5–10m
Small	€100,000–400,000
%reduction for post-2007 Schengen countries	40–80%

#### 4. Estimating the budgetary costs of non-Schengen

Having prepared all the underlying data, we now determine possible scenarios of development. For simplicity, we assume three scenarios:<sup>114</sup>

1. a two-year suspension of the Schengen Area in the five countries that have recently re-introduced border controls (Austria, Denmark, Germany, Norway and Sweden) and only at places where they have been re-introduced;
2. a two-year suspension of the Schengen Area and re-introduction of border controls in all Schengen countries at all internal borders;
3. indefinite suspension of the Schengen Agreement in all countries.

For Scenarios 1 and 2 we provide cost estimates for the two years of temporary border re-introduction. For Scenario 3 we provide an annual cost estimate and the total estimated costs for the first ten years after border re-introduction.

Note that the calculations refer only to *additional* costs related to the new borders and do not represent the total expenditure on border controls (particularly the cost of protecting maritime and air borders). For example, the estimates for Germany only reflect additional

<sup>114</sup> Due to linearity and the independence property of our cost modelling, costs associated with any subset of countries/borders is directly proportional to their share of border crossing points out of the total. Similarly, operating costs are assumed to be constant across years and annual costs can thus be multiplied to obtain estimates for multiple years.

costs of re-establishing land borders and processing additional passengers at airports and ports but do not include existing costs of maintaining air and sea borders that occur regardless of the Schengen Agreement. Furthermore, we do not consider additional visa processing costs in Scenario 3 as a result of third-country nationals having to apply for multiple visas when visiting more than one Schengen country rather than just a single Schengen visa, as in the current arrangement. This is due to high degree of uncertainty in terms of passenger flows should the Schengen Area be abolished and lack of reliable data on visa-processing expenses. Again, our estimates are thus conservative and the actual figures may be higher.

There are also several caveats to be mentioned. Firstly, we assume that the border crossing points identified in the European Parliament regulation<sup>115</sup> would all be re-established. However, it is possible that actual numbers may be either lower and higher given that some cross-border roads may be closed or given local border traffic status rather than guarded, reducing the potential total costs, or on the contrary some newly built roads not recorded in the 2006 documentation may serve as new crossing points. We try to minimise such occasions by excluding former local border traffic and tourist crossing points from our analysis.

Secondly, using a single cost estimate for such a wide variety of countries inherently introduces error in the analysis. Consider, for example, patrolling costs in the light of the current migration crisis in Europe. Arguably, countries on the main migrant route such as Austria and Germany are likely to aim for a higher degree of internal Schengen border surveillance than for example Poland or Estonia, thus possibly overstating patrolling costs for the latter two countries and understating them for the former. We try to reduce this error by using both Swiss/Latvian and Finnish estimate to account for differences in geography across Europe and by introducing a range around the point estimate to give a better idea of the potential costs. Finally, the analysis does not take into account possible bilateral agreements allowing barrier-free movement of people such as the former Nordic Passport Union; these would partially open borders again and thus lower potential costs. The main parameters used in the calculation are summarised in Table 2.4. All figures are in 2016 prices, i.e. using present value of money.

**Table 2.4: Parameters used in the cost estimation**

Parameter	Lower bound	Upper bound	Source
Border outpost re-establishment - large	€80m	€200m	Calexico, CA, Columbus, NM, and Laredo, TX (all USA)
Border outpost re-establishment - medium	€5m	€10m	Ivangorod-Narva, Estonia; Bijaca, Bosnia and Herzegovina

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<sup>115</sup> List of border crossing points referred to in Article 2(8) of Regulation (EC) No 562/2006 of the European Parliament and of the Council of the EU of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code).

Border outpost re-establishment – small	€100,000	€400,000	Expert opinion
Reduction in re-establishment costs for new Schengen countries	40%	80%	Expert opinion
Operating costs per border crossing point – Europe	1,559,657		Latvian State Border Guard, Swiss Federal Finance Administration
Operating costs per border crossing point – Scandinavia	11,045,924		Finnish open data service
Passenger processing time (without visa)	0.5 minutes	2.5 minutes	Council of the European Union note <sup>116</sup>
Passenger processing time (visa requirement)	1 minute	5 minutes	
Additional officers per large border – air borders	12	35	Authors' calculations
Additional officers per large border – maritime borders	4	10	
Additional officers per small border	2	2	European Commission (2016b)

#### 4.1 Scenario 1: two-year border introduction in five countries at specific locations

The two-year suspension corresponds to the legal time limit for reinstating temporary border controls in the context of the current Schengen Agreement as per Article 29 of the SBC. The five countries with effective internal border controls as of June 2016 are:<sup>117</sup>

- **Austria:** at the Austrian–Hungarian land border and Austrian–Slovenian land border;
- **Denmark:** in the Danish ports with ferry connections to Germany and at the Danish–German land border;
- **Germany:** at the German–Austrian land border;
- **Norway:** in the Norwegian ports with ferry connections to Denmark, Germany and Sweden;
- **Sweden:** in the Swedish harbours in the Police Region South and West and at the Öresund bridge.

Unfortunately, there are currently no data available on the actual costs of the recently re-introduced border controls. Should country officials believe that any border controls are only temporary, it is unlikely that land border outposts would be reinstated in full.<sup>118</sup> Moreover, contrary to Scenario 2 we assume that personal and other equipment as well as human resources would be relocated within countries and that either no or insignificant

<sup>117</sup> European Council press release available at <http://www.consilium.europa.eu/en/press/press-releases/2016/05/12-internal-border-controls/>.

<sup>118</sup> This assumption is in line with testimonies offered by interviewed officials.

funds would be spent on new equipment and hiring additional staff. This assumption is in line with information obtained during our interviews and based on the fact that controls were re-introduced at only a small proportion of land borders in Austria, Denmark and Germany, and in ports that had such equipment prior to re-introduction of the additional controls to check passengers coming from outside the Schengen Area.

The bottom line is that there would be little to no additional fixed and operating costs as a result of relocating resources within countries. However, to give an indication of maximum potential costs should all equipment be purchased and new staff hired, we use the same methodology as in Scenarios 2 and 3 with a proportionally reduced number of assumed operating border crossing points. In particular, we assume that all types of border crossing point would require the same additional equipment (personal computers, passport readers, face-recognition machines and fingerprint scanners) but that land border crossing points would also need equipment for newly hired border-force officers (particularly fully equipped cars), backed up by sufficient infrastructure. Without any data available, we suggest as a conservative estimate that an additional €20,000–40,000 would need to be spent per land border crossing point on average for all equipment. For air and maritime borders, we follow the methodology introduced in the previous section.

Using these estimates, the upper bound on costs of border protection over the two years at the selected borders, including one-off fixed costs, would be €211.5m. The assumed costs of border protection *in addition* to what would otherwise be spent on human and capital resources that are likely to be relocated within countries would be in range of €0–**211.5m**.<sup>119</sup>

#### **4.2 Scenario 2: two-year border introduction in all Schengen countries**

As in Scenario 1, it is unlikely that a temporary re-introduction of border controls, although this time on a larger scale, would prompt countries to hire a substantial number of new border-force officers or even rebuild permanent border crossing points. Notwithstanding that, additional equipment would have to be purchased to reflect the increase in the number of passengers to be checked. We assume that these costs would be the same as in Scenario 1, i.e. €20,000–40,000 per land border crossing point and as per the detailed breakdown shown in Table 2.4 for air and maritime border crossing points.

Note that the purpose of calculating fixed costs in this scenario is essentially to show the vast difference between these and both the operating costs and fixed costs in Scenario 3. Starting with **operating costs**, our total estimate is **€2.19–3.65bn** to be spent **annually** in all Schengen countries. Unsurprisingly, the highest costs would be on the German side, whereas Greece, Iceland, Malta and the Eastern European countries would be least affected. Greece, Malta and Iceland do not have any land borders with other Schengen countries and the added costs would only be related to additional checks on air and maritime transport passengers. Fixed costs have a similar distribution although we can see that they are much lower than operating costs, in range of **€58.6–108.6m**. Detailed data are shown in Table 2.5.

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<sup>119</sup> In other words, the estimate does not include e.g. salaries of police officers who would otherwise have different duties within the state service.

Table 2.5: Scenario 2 – estimated costs

Country	Land border length	Fixed costs		Operating costs		
		Lower bound	Upper bound	Point estimate	Lower bound	Lower bound
Austria	2,562	4.1	8.3	199.6	149.7	249.5
Belgium	1,385	1.5	2.9	93.6	70.2	117.0
Czech Republic	1,881	2.8	5.7	182.5	136.9	228.1
Denmark <sup>c</sup>	68	2.6	4.2	77.7	58.3	97.1
Estonia	339	1.1	1.8	46.5	34.9	58.1
Finland	1,350	1.7	3.0	121.5	91.1	151.9
France	2,828	5.4	10.4	201.2	150.9	251.5
Germany	3,621	10.2	19.1	369.6	277.2	462.0
Greece <sup>a</sup>	-	1.7	2.8	23.2	17.4	29.0
Hungary	1,145	1.4	2.8	81.1	60.8	101.4
Iceland <sup>a</sup>	-	0.6	1.0	2.0	1.5	2.5
Italy	1,890	5.1	8.9	127.9	95.9	159.9
Latvia	1,323	1.2	2.3	67.1	50.3	83.8
Liechtenstein	76	0.1	0.2	9.4	7.0	11.7
Lithuania	544	0.9	1.7	54.6	40.9	68.2
Malta <sup>a</sup>	-	0.1	0.1	4.8	3.6	6.0
Luxembourg	359	0.4	0.8	31.2	23.4	39.0
Netherlands	1,027	1.6	3.0	90.5	67.8	113.1
Norway	2,355	2.5	4.2	265.1	198.8	331.4
Poland	1,649	2.7	5.3	145.0	108.8	181.3
Portugal	1,214	1.9	3.6	104.5	78.4	130.6
Slovakia	1,427	1.6	3.1	107.6	80.7	134.5
Slovenia	664	1.1	2.2	82.7	62.0	103.3
Spain	1,837	3.6	6.9	151.3	113.5	189.1
Sweden	2,233	2.4	4.2	276.1	207.1	345.2
Switzerland <sup>b</sup>	1,880	-	-	-	-	-
<b>Total</b>	<b>33,657</b>	<b>58.6</b>	<b>108.6</b>	<b>2,916.2</b>	<b>2,187.2</b>	<b>3,645.3</b>

Note: in € millions per year, 2016 prices, PPP adjusted

a Operating costs calculated using passenger flows methodology (see Appendix for details).

b No additional costs assumed as border controls and surveillance are functioning at the moment.

c Operating costs calculated from estimates obtained using the two methodologies.

### 4.3 Scenario 3: Permanent suspension of the Schengen Agreement in all countries

In the third scenario we consider border controls to be permanently re-introduced on all internal Schengen borders. Most of the elements are unchanged from Scenario 2, but now we also consider fixed costs related to outpost rebuilding and refurbishment. Indeed, without alternative regional arrangements in place such as a free-traffic zone between

Sweden and Norway (which are not considered in this scenario), countries would need to fully re-establish all land border crossing points rather than temporarily substitute the posts with mobile border force units. As discussed in the methodology section we distinguish large, medium, and small outposts and their related building costs, with reduced costs for countries that joined Schengen Area in 2007 and later, as these countries would need only to refurbish existing, albeit no longer used, checkpoints.

Based on these assumptions, the total annual costs in Scenario 3 would again be in the range of €2.19–3.65bn, with an additional €7.41–19.76bn to be spent on the re-establishment of land borders. The total budgetary costs over a ten-year period would thus be €29.31.1–56.26bn for all countries in the Schengen Area.

Finally, in line with the recent European Parliamentary Research Service report (EP 2016b) we also present estimated costs only for the **five countries** that have recently re-introduced border controls. Assuming these countries would leave the Schengen Area indefinitely, they would face **€3.17–7.70bn** in one-off fixed costs and **€0.92–1.54bn** in annual operating costs.

Table 2.6: Scenario 3 – estimated costs

Country	Land border length	Fixed costs		Operating costs		
		Lower bound	Upper bound	Point estimate	Lower bound	Upper bound
Austria	2,562	868.4	2,102.6	199.6	149.7	249.5
Belgium	1,385	408.3	986.3	93.6	70.2	117.0
Czech Republic <sup>d</sup>	1,881	94.6	684.7	182.5	136.9	228.1
Denmark <sup>c</sup>	68	110.0	270.1	77.7	58.3	97.1
Estonia <sup>d</sup>	339	13.9	96.3	46.5	34.9	58.1
Finland	1,350	107.8	261.0	121.5	91.1	151.9
France	2,828	883.5	2,136.1	201.2	150.9	251.5
Germany	3,621	1,556.5	3,766.5	369.6	277.2	462.0
Greece <sup>a</sup>	-	1.7	2.8	23.2	17.4	29.0
Hungary <sup>d</sup>	1,145	40.5	292.6	81.1	60.8	101.4
Iceland <sup>a</sup>	-	0.6	1.0	2.0	1.5	2.5
Italy	1,890	552.6	1,337.4	127.9	95.9	159.9
Latvia <sup>d</sup>	1,323	202.9	491.3	67.1	50.3	83.8
Liechtenstein	76	257.5	633.3	9.4	7.0	11.7
Lithuania <sup>d</sup>	544	39.2	285.6	54.6	40.9	68.2
Malta <sup>a</sup>	-	0.1	0.1	4.8	3.6	6.0
Luxembourg	359	116.9	280.7	31.2	23.4	39.0
Netherlands	1,027	399.3	966.3	90.5	67.8	113.1
Norway	2,355	237.7	576.9	265.1	198.8	331.4
Poland <sup>d</sup>	1,649	66.7	481.0	145.0	108.8	181.3
Portugal	1,214	367.7	891.9	104.5	78.4	130.6
Slovakia <sup>d</sup>	1,427	60.5	439.0	107.6	80.7	134.5
Slovenia <sup>d</sup>	664	57.5	418.1	82.7	62.0	103.3
Spain	1,837	568.7	1,377.3	151.3	113.5	189.1
Sweden	2,233	401.1	983.9	276.1	207.1	345.2
Switzerland <sup>b</sup>	1,880	-	-	-	-	-
<b>Total</b>	<b>33,657</b>	<b>7,414.5</b>	<b>19,762.9</b>	<b>2,916.2</b>	<b>2,187.2</b>	<b>3,645.3</b>

Note: in € millions per year, 2016 prices, PPP adjusted

a Operating costs calculated using passenger flows methodology (see Appendix for details).

b No additional costs assumed as border controls and surveillance are functioning at the moment.

c Operating costs calculated from estimates obtained using the two methodologies.

d Countries with existing border outposts in need of refurbishment.

Finally, Table 2.7 contains an overview of annual costs and fixed costs in all three scenarios. As we can see, the total annual costs would be at least 0.02–0.03 per cent of Schengen Area GDP. Note that these conservative estimates are based on a multitude of assumptions and are considerably lower than the alternative estimates using per-passenger costs shown in the Appendix. They should therefore be taken with caution as it is possible that actual costs would be higher.

**Table 2.7: Cost estimates in Scenarios 2 and 3**

	Fixed costs		Operating costs	
	In € million	As % of Schengen Area GDP	In € million	As % of Schengen Area GDP
Scenario 2	58.6–108.6	Less than 0.01%	2,187.2–3,645.3	0.02–0.03%
Scenario 3	7,414.5–19,762.9	0.06–0.16%	2,187.2–3,645.3	0.02–0.03%

### III - Social costs: crime and security

As in the United States, reports have highlighted the fact that Europe has experienced a general downward trend in crime rates since the mid-1990s (Tonry 2014), although others have suggested that this applies only to specific crimes such as property crimes and homicides, whereas other violent crimes (including assault and sexual crimes) are increasing in parts of Europe (Aebi & Linde 2010). Overall, analysing crime trends and their determinants is a complex endeavour and no consensus has been reached in the academic literature on the factors driving the aforementioned trends. Some argue that increased alcohol consumption, especially among youth, may have led to higher rates of violent crime over the last decades (Aebi & Linde 2010), whereas Tonry (2014), for instance, argues that the rise in reported non-lethal violent crimes such as assaults, sex and family-violence has been observed because of a shift in the cultural threshold of tolerance in reporting such crimes, suggesting that this increasing trend might be driven by changes in reporting patterns rather than by the underlying frequency with which these types of crime are committed.

Furthermore, some have argued that demographic change leads to decreasing youth cohorts, which may subsequently have led to lower crime rates (Baumer 2008). The explanation behind this (well documented in the literature) is that youth, especially young men, are over-represented as perpetrators of crime compared to any other demographic group. Another set of research focuses on the influence of economic variables in explaining trends in crime. Emphasising property crimes, some argue that national differences in economic factors such as inflation, unemployment and economic growth are relevant determinants of crime (Buonanno et al. 2014).

In this regard, in many European member states, especially those that joined the EU from 2004 onwards, the socio-economic situation has improved over the last decade, with increasing standards of living, output and employment leading to lower rates of property

crime. In addition, Aebi and Linde (2010) argue that the reinforcement of police measures at external EU borders in the light of Schengen has played a major role in reducing crime by making it more difficult for criminals to transport illegal goods.

In summary, the analysis of crime is complex and many theories exist in the literature as to why certain crime trends observed over the last decades have occurred, but no conclusive explanation has emerged. Building on work by Ademmer et al. (2015), which analyses regional crime trends between existing and newly acceding Schengen states in light of the 2007 Schengen enlargement, the analysis that follows does not aim to provide an explanation of the causal effects of the crime trends described above but to provide an illustrative overview on how trends in certain types of crime evolved before and after the 2007 Schengen enlargement for different groups of countries and regions.

## 1. Acquisitive and violent crime

In order to assess the associations between abolishing border controls and crime rates, we investigate in more detail the 2007 Schengen enlargement during which all new member states except Cyprus entered the Schengen Area. In particular, we focus in more detail on the existing Schengen states and the newly acceding Schengen states (Czech Republic, Poland, Hungary, Slovakia, Slovenia, Estonia, Latvia and Lithuania).

In essence, the purpose of this analysis is to investigate whether we can observe different trends in crime rates for existing Schengen states before and after the 2007 enlargement, with a particular attempt to test the hypothesis that those states with direct borders to the newly acceding Schengen states (Germany, Italy, Austria, Sweden and Finland)<sup>120</sup> were affected by substantial changes in crime rates. We also examine whether there has been a change in crime rates in the new Schengen states compared to non-Schengen states in the same region. Note that the 2007 Schengen enlargement happened *de facto* in December 2007. Hence, in what follows, we look at time trends before and after 2008, the year in which we would expect changes in crime statistics if the opening of borders is related to crime trends.

Unfortunately, no comprehensive quantitative data on cross-border crimes exist. To counter this deficiency, we use three different data sources, (1) UNODC crime statistics (2003–2014), (2) European Social Survey (2002–2014), and (3) Eurostat regional crime data (2008–2010) and investigate how crime rates evolve in the existing western Schengen states and in the new Schengen states and their neighbouring non-Schengen states.

When analysing crime trends across countries several well-known issues have to be considered. Firstly, police-reported crimes may underestimate the true number of committed crimes. For instance, there is good reason to assume that people may not report

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<sup>120</sup> Note that Sweden and Finland do not have substantial direct land borders to new Schengen states from the 2007 Schengen enlargement. Nevertheless, Finland has close maritime borders and active ferry traffic with Estonia, and Sweden has close maritime borders with the Baltic states and Poland.

minor crimes to the police because they feel ashamed of being a victim, because the monetary value lost is too little to make the effort of reporting the crime worthwhile (Buonanno et al. 2014) or because the person has a lack of trust in the ability of the police to find a criminal. Nevertheless, criminological literature (e.g. Aebi & Linde 2010) suggests that reported crime data is appropriate when studying the evolution and trends in crime across countries under the assumption that recording procedures do not change substantially over time. Secondly, when using reported crimes for cross-country analysis, one has to be cautious due to the heterogeneity of reporting rates across time and countries. For instance, reporting rates differ across countries and hence it has been suggested that it is also useful to compare reported crimes with crime victimisation survey data (Van Dijk, Van Kesteren, & Smith, 2007). Thirdly, another problem when analysing crime statistics is that the classification of crimes may differ across countries.

### **1.1 Cross-country trends in acquisitive crime and homicide rates (2003-2013)**

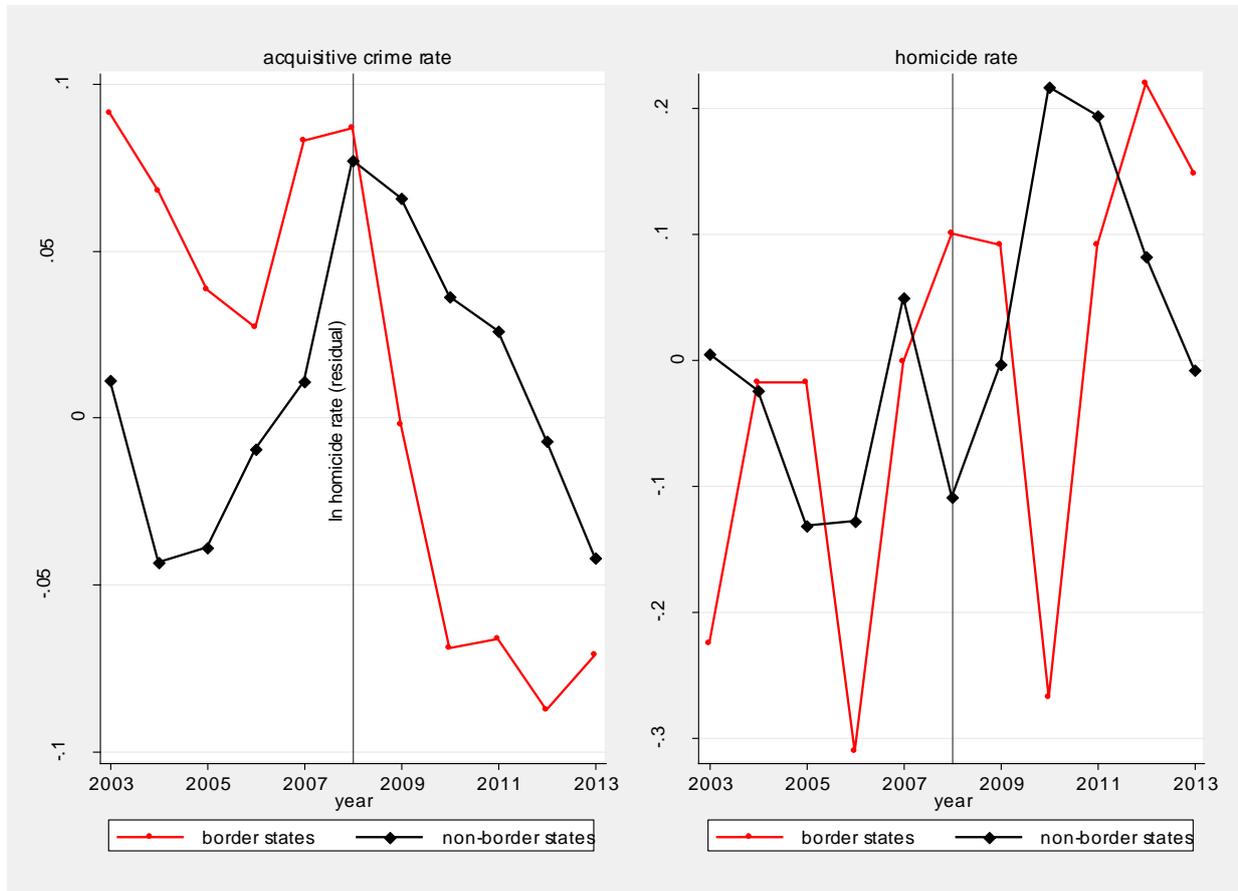
In order to tackle the aforementioned issues in analysing cross-country and cross-regional trends in crime rates we follow Buonanno et al. (2014) and look separately at homicide rates and an aggregate measure of several other crimes called 'acquisitive crime' (including burglary, theft, car theft and robbery) to circumvent to some extent different crime classifications between countries. In addition, we not only look at police-reported crimes but also use crime victimisation survey data from the ESS. Lastly, we use the natural logarithm of crime rates and apply country/region and time-fixed effects to alleviate the potential under-reporting issue and to negate the influence of measurement error that is constant over time or space.

Figure 2.2 depicts trends in acquisitive crime and homicide rates for Western Schengen states before and after the 2007 Schengen enlargement. Note that the time series are adjusted for country-specific and time-specific effects.<sup>121</sup> Interestingly, although for acquisitive crimes we observe a downward trend after 2008, the decreasing trend is somewhat stronger in states with direct borders to the new Schengen members after 2007. Looking at homicide rates, we cannot observe a clear upward or downward trend for Western Schengen states either with or without direct borders to the Eastern Schengen states that entered the area in 2007. While there is some slight increase in homicide rates in Western states without direct borders from 2008 to 2010, the trend falls afterwards.

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<sup>121</sup> E.g. depicted are the residuals from a linear regression model using OLS employing the crime rate as outcome variable and controlling for country and year fixed effects.

Figure 2.2: Trends in acquisitive crime and homicide rates in existing Schengen states before and after 2007 Schengen enlargement



Notes: based on UNODC crime statistics. Entries depict the residual crime rates for different groups of countries over time after taking into account country- and time-specific effects based on a linear regression.

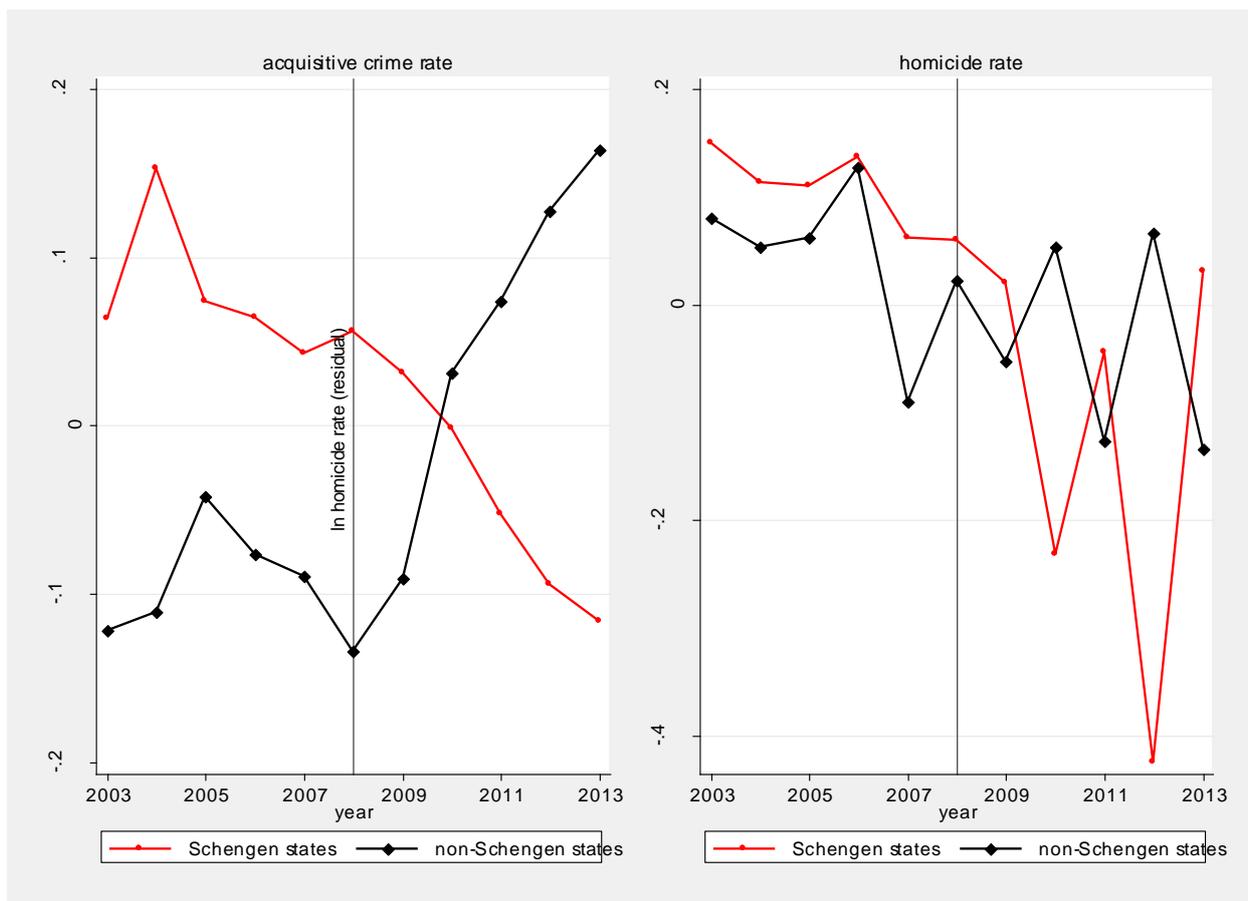
Furthermore, figure 2.3 depicts trends in acquisitive crime and homicide rates for the newly acceding Schengen states entering the area in 2007 compared to non-Schengen countries in the same region (Bulgaria, Romania, Croatia, Moldova and Ukraine). The rate of acquisitive crimes falls in the period before 2007 for the newly acceding Schengen states and continues with a downward trend thereafter. The figures even reveal a slightly more downward sloping trend after 2007. The same applies to homicide rates, although the rate fluctuates relatively strongly in the post-2007 period, and a clear trend cannot be determined.

While the time-series in figures 2.2 and 2.3 are adjusted for time-invariant country effects and general time-effects, other time-varying variables such as a country's GDP per capita as a measure of wealth might also influence overall differences in crime rates across countries. In order to test whether the different trends across groups of countries depicted in figures 2.2 and 2.3 are robust to the inclusion of further control variables and are indeed statistically significant, we estimate the following linear regression model using OLS:

$$crime_{it} = \beta_0 + \beta_1 after_t + \beta_2 group_{it} + \beta_3(after * group)_{it} + \beta_4 C_{it} + \theta_c + \gamma_t + \varepsilon_{it} \quad (1)$$

Where  $crime_{it}$  in equation (1) represents the natural logarithm of the number of police reported crimes per 100,000 inhabitants (burglaries, vehicle theft, theft and robbery) and the number of homicides per 100,000 inhabitants in country  $i$  in year  $t$ . We use both police reported crimes from the UNODC (United Nations Office on Drugs and Crime) crime database and crime victimisation survey data from the ESS.<sup>122</sup>  $C_{it}$  represents a vector of control variables including the GDP per capita (from World Development Indicators [WDI]), total population (Eurostat), net migration (Eurostat), total number of people working for police and in prisons, the share of young males among the total population (Eurostat), and unemployment rate (WDI). It is noted in the criminological literature that controlling for the age structure is very important as young males are statistically more likely to be criminal offenders than any other demographic group (Levitt & Lochner 2001). In addition, different levels of unemployment may determine levels of crime. Economic theory would predict that, all else being equal, an increase in unemployment may induce rises in crime levels as the opportunity costs (e.g. earning a market wage) decrease. Note that  $\theta_c$  represents country-fixed effects, and  $\gamma_t$  (group-specific) time effects.

**Figure 2.3: trends in acquisitive crime and homicide rates in newly acceding Schengen and non-Schengen states before and after 2007 Schengen enlargement**



<sup>122</sup> In each round, the ESS asks people whether a member of the household has been a victim of robbery or burglary within the last five years.

Notes: based on UNODC crime statistics. Entries depict the residual crime rates for different groups of countries over time after taking into account country- and time-specific effects based on a linear regression.

For the comparison of crime trends across countries of similar economic and institutional settings, we split the available country-level data into two samples: (1) one including all existing Schengen states before and after 2007, and (2) one including the newly acceding Schengen and non-Schengen states in the same region before and after 2007. In the first sample, the indicator variable  $group_{it}$  takes the value 1 if a country has a direct border to the newly acceding Schengen states (namely Austria, Germany, Italy, Finland or Sweden) and 0 for all other existing Schengen states without direct borders. For the second sample, the indicator variable takes the value 1 for all the newly acceding Schengen states (Czech Republic, Slovakia, Hungary, Slovenia and Poland) and 0 for all non-Schengen states. The parameter estimate  $\beta_2$  reports whether there are any initial differences in the level of crime rates between the two groups of countries.  $after_t$  takes the value 1 after 2008 and represents the period after the new Schengen states entered the area. In essence, in the analytical framework outlined by equation (1) the parameter estimate  $\beta_1$  indicates the average crime-rate trend for those countries not in  $group_{it}$ . In addition,  $\beta_3$  indicates whether for countries included in the group of interest ( $group_{it}$ ) we observe a change in the average crime rates after 2008 compared to those countries not included in the group.<sup>123</sup>

The fully detailed regression output table can be found in the Appendix tables AC.1 and AC.2, whereas tables 2.8 and 2.9 below summarise the findings more generally and confirm widely the trends observed in figures 2.2 and 2.3. In existing Schengen states, outlined in table 2.10, crime rates are generally falling but as the data suggest, this fall is even more pronounced in states with direct (internal) borders to countries that joined Schengen in 2007. This applies for police-reported crime as well as self-reported crime victimisation rates. In addition, individuals are more likely to report that they feel secure in their neighbourhood at night in states with direct borders.

Table 2.11 reveals that the newly acceding states the Schengen area in 2007 report lower rates of crime for both acquisitive crimes and homicides. This also applies when examining self-reported crimes (column 3). In addition, individuals in Schengen states feel relatively more secure after the abolishment of border controls (column 4).

**Table 2.8: Summary table trends in crime rates in existing Schengen states before and after 2007**

	(1)	(2)	(3)	(4)
<i>Existing Schengen states</i>	<i>police-reported acquisitive crime</i>	<i>police-reported homicide</i>	<i>self-reported acquisitive crime</i>	<i>self-reported feeling secure</i>
- <i>Data source:</i>	UNODC		ESS	
(1) No direct border	-7.87%	-13.86%	-1.10%	0.12%

<sup>123</sup> Note that the overall average change in crime rates for countries included in  $group_{it}$  is calculated as the sum of  $\beta_1$  and  $\beta_3$ , whereas  $\beta_3$  represents the change for countries in the group net of a common time trend similar for both groups of countries.

$\Delta$ before 2008 - after 2008	(2) Direct border	-28.03%	-10.17%	-5.83%	4.40%
	(2)-(1)	-20.16%	3.69%	-4.73%	4.28%

Notes: based on parameter estimates reported in table AC.1 in Appendix C.

The crime trends presented above tell a compelling story, countering the hypothesis that abolishing (internal) border controls in the light of Schengen leads to increased crime and insecurity. If at all, we observe downward trends in acquisitive crime rates. It is important to note that the parameter estimates presented in the tables above represent associations and not causal effects. Although we aim to control for as many potential confounding factors as possible, unobserved factors that may affect crimes rates after 2008 may still be correlated with any of the parameters of interest, hence leading to a biased estimates. What is more, the types of crimes investigated in this section do not paint the full picture on how the abolishment of border controls may affect levels of crime as other types of crime such as drug or human trafficking activities are also impacted by changes in the extent of border controls. Hence, in section 2 below we investigate the associations between Schengen and drug trafficking in more detail.

While the presented findings for acquisitive and homicide rates emphasise the between-country aspect of crime and Schengen, it is also important to investigate whether border regions within countries evolve differently over time in terms of their crime rates compared to non-border regions.

**Table 2.9: Summary table trends in crime rates in newly acceding Schengen and non-Schengen states before and after 2007**

		(1)	(2)	(3)	(4)
<u>Newly acceding Schengen states</u>		<i>police-reported acquisitive crime</i>	<i>police-reported homicide</i>	<i>self-reported acquisitive crime</i>	<i>self-reported feeling secure</i>
<i>Data source:</i>		UNODC		ESS	
$\Delta$ before 2008 - after 2008	(1) No direct border	-15.69%	-19.29%	-6.48%	-18.32%
	(2) Direct border	-29.74%	-43.20%	-27.21%	24.62%
	(2)-(1)	-14.05%	-23.91%	-20.73%	42.94%

Notes: based on parameter estimates reported in table AC.2 in Appendix C.

### 1.2 Cross-regional trends in acquisitive crime and homicide rates: border versus non-border regions

The previous section investigated cross-country crime trends between different groups of Schengen and non-Schengen states before and after the 2007 Schengen enlargement. As mentioned above, it has been argued by some that the abolishment of border controls in light of Schengen may have improved economic output but at the cost of higher crime and

insecurity (Vasilopoulou 2013). If this hypothesis holds, one could expect that such effects on crime might be more pronounced in border regions than in non-border regions due to their closer proximity to regions in countries with lower levels of economic prosperity. Hence, we would expect that regions with direct borders to the Eastern Schengen states might be affected disproportionately. At the same time, one could argue that border regions may not be the most economically advanced regions due to their peripheral character and hence criminal activities may focus more in less peripheral and more urban centres further away from borders.

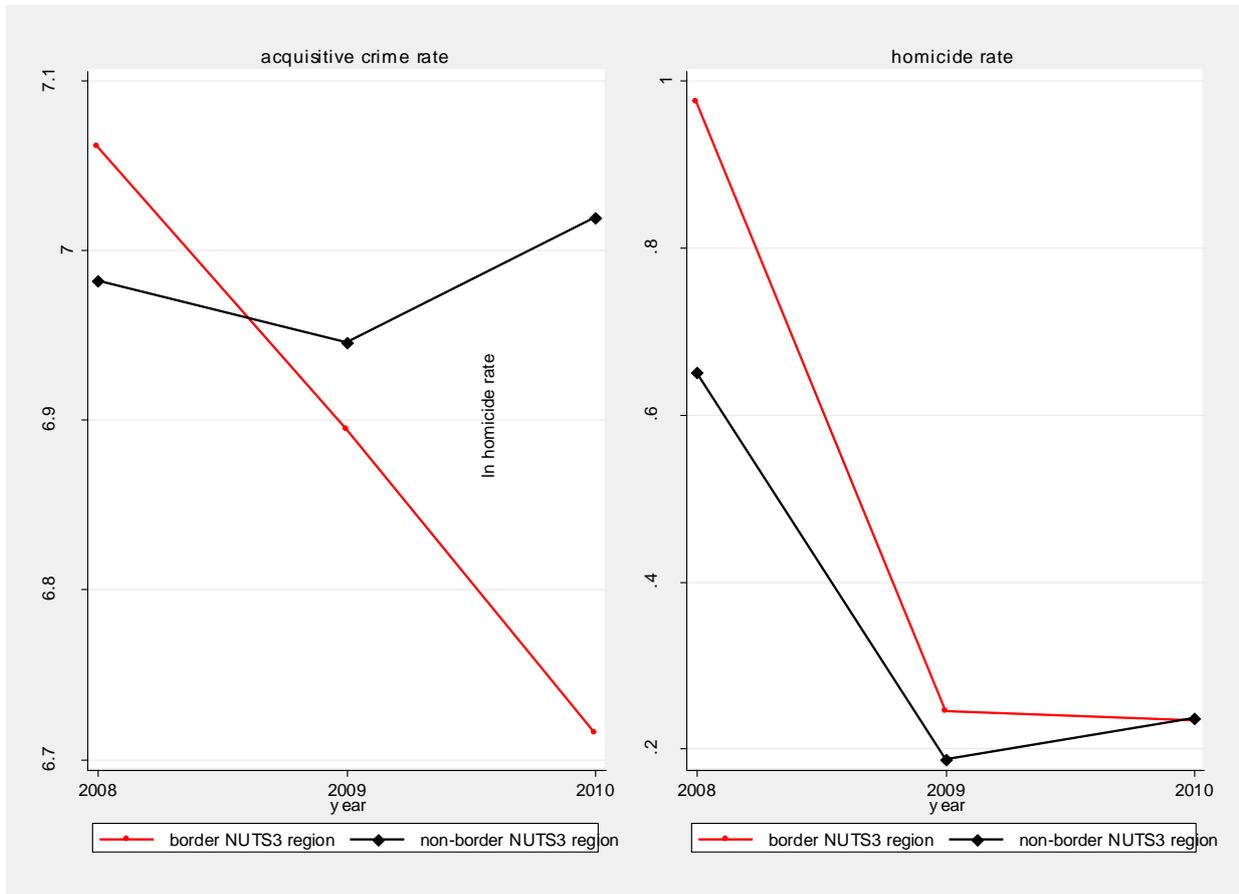
In this section, and similarly to Ademmer et al. (2015), we investigate how trends in crime rates evolve within countries by comparing border to non-border regions. To that end we run similar regression models as illustrated in equation (1) but using regional police reported crime level data (burglary, robbery and car theft) for NUTS 3 (Nomenclature of Territorial Units for Statistics) regions provided by Eurostat (n.d.) as our outcome variable of interest. Unfortunately these data are only publicly available for the years 2008, 2009 and 2010. Hence, we can only compare whether trends in crime rates evolve differently for border versus non-border NUTS 3 regions after the 2007 enlargement from 2008 for three years onwards. For the purposes of this analysis we look at NUTS 3 regions of countries with direct land borders to the Eastern Schengen states, namely Austria, Germany and Italy, as well as NUTS 3 regions in southern Sweden and Finland with maritime links to the Baltic States.

Figure 2.4 depicts trends for NUTS 3 regions in existing Schengen states with borders that were abolished as a result of the Schengen Area enlargement in 2007 compared to NUTS 3 regions without such borders within the same country.<sup>124</sup> Note that the parameter estimates are adjusted for regional GDP per capita, regional type (metropolitan or mountainous), net migration and total population of the region.

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<sup>124</sup> Countries included are Austria, Germany, Italy, Sweden and Finland.

**Figure 2.4: Regional trends in acquisitive crime (burglary, car theft and robbery) and homicide rates between border and non-border NUTS 3 regions**



Interestingly, the trend is similar to the one reported in the previous section for trends across countries. Overall, crime rates tend to decrease faster for border regions than for non-border regions.

While it is important to stress that this analysis cannot identify any causal effect Schengen enlargement may have had on crime rates in border countries and their border regions, the results do not support the hypothesis that the abolition of internal borders has led to an increase in crime or that border regions would be particularly affected by this phenomenon.

## 2. Illicit drug trade

As mentioned above, crime is a multifaceted phenomenon and any attempt to try to investigate its associations should consider different types of crimes. Whereas the sections above looked at acquisitive and violent crime, in this section we examine in more detail whether abolishing direct border controls at border crossing points alters the ability of countries to tackle cross-border drug trafficking. Some argue that there is a clear 'border effect' and that a lack of border controls, as one important supply-reduction strategy, weakens attempts to efficiently combat the illicit drug trade. The argument is that open borders reduce the costs of trafficking as, once the drug has passed external Schengen

borders, arguably no further controls within the whole Schengen Area should be expected (McCabe 2015). This is more or less in line with the argumentation of the basic economic framework of crime whereby a lack of direct border controls may reduce the expected 'cost' of criminal activity, in this case, trafficking illicit drugs across borders. However, at the same time one could argue that supply-reduction strategies such as improved cross-border police cooperation and other law-enforcement mechanisms building on Schengen compensatory measures could have made the fight against drug trafficking more effective. For instance, police resources that were caught up at border controls can now focus on other activities such as combatting cross-border crime (Pána 2011). Hence, the argumentation could go in both directions and the theoretical arguments are inconclusive.

The aim of this analysis is to investigate whether the abolishment of border controls in light of Schengen is hampering the fight against the illicit drug trade across Europe. We compare how different proxy indicators of supply-reduction efforts evolve before and after a country abolishes border controls. Attributing before and after trends in the quantity of seized drugs in a given country only to Schengen may be misleading as other (unobserved) effects might influence such indicators, including changes in demand or supply shocks in production countries. In order to take these factors into account we benchmark the change in the volume of drugs seized before and after becoming member of the Schengen Area with countries that have not been part of the area at a given point in time.

Note that analysing illicit drug markets is not straightforward due to some special features of such illegal markets, including for instance (1) the role of imperfect information where sellers and buyers are uncertain about the quality and quantity of drugs in a transaction and (2) the role of enforcement in affecting the price of drugs and the way they are produced and distributed. Firstly, when buying an illegal drug one only learns its purity after the sale is made. Based on US data, Galenianos, Liccardo Pacula, and Persico (2009) found that five to ten per cent of transactions were faked. These so-called 'rip-off' transactions involved no drug content at all, although buyers paid the same average amount for the product as they did for real drugs. Unlike in a normal goods market, product quality in a drug market cannot be enforced by the buyer lawfully. Galenianos et al. (2009) argue that under these circumstances repeated transactions with a particular seller are more likely – or, in other words, regular buyers keep their sellers honest by discouraging rip-offs. That is, stronger enforcement may make repeated interactions more likely and increase the purity of the drug sold. For instance, higher levels of undercover police activity may induce a higher risk of switching suppliers as the next supplier could be an undercover police officer. Hence, it has to be taken into account that enforcement may affect simultaneously the quantity and quality sold in a given drug market.

Secondly, when looking at the supply side with a focus on Europe, synthetic drugs and marijuana (for instance) are produced within Europe but also trafficked into European countries over a variety of different trafficking routes (EMCDDA 2015). Stronger enforcement in some of the source countries could increase costs of production and hence induce a substitution effect to synthetic drugs or marijuana produced within European borders. However, it is not only changes in enforcement in source countries which might affect production of these drugs. More efficient border controls may lead to fewer drugs being trafficked cross-border, with a resultant increase in domestic production to satisfy demand. These two factors may confound any parameter estimate in empirical analysis.

Therefore, to mitigate the confounding nature of these challenges in analysing the drug markets described above, we focus only on drugs with virtually zero production within Europe: cocaine and opiates.

Cocaine is mainly produced in South America and shipped over different routes to Europe. The main countries through which cocaine enters Europe are Spain, Portugal, the Netherlands, Belgium and Italy, with the first two providing the major share of cocaine seizures (United Nations Office on Drugs and Crime [UNODC] 2009). Western Europe, one of the world's largest heroin markets, sources its heroin primarily from opium grown in Afghanistan via a number of land routes, including the 'northern' route across Central Asia and Russia, and the 'Balkan' route across Eastern and Southeastern Europe (Siddharth & Barkell 2013). For both cocaine and opiates, European supply-side reduction strategies are predominantly based on intelligence-led law enforcement, including exchange of information across national and international agencies (Council of the EU 2008).

As outlined in the analytical framework by Kilmer and Hoorens (2010), a host of indicators exist to assess whether supply-side reduction measures work. These include, among others, drug seizures and purity-adjusted prices. In essence, seizures of illicit drugs serve several purposes: (1) as a potential deterrent to transporting drugs (across borders); (2) generating information about the geographic flow of drugs; and (3) providing a performance measure for law-enforcement agencies. The issue with drug seizures as a supply-reduction indicator is that it is a function of the overall quantity of drugs shipped, the relative performance of the enforcement agencies, and the general 'ability' or 'productivity' of drug traffickers. So for instance, observing an increase in the volume of drug seized between Schengen states compared to non-Schengen states (e.g. comparing Hungary with Serbia) after 2008 could, all else being equal, be driven simply by a larger volume of drug traffic through Hungary, as smugglers may find it more effective to change their route through states without physical border controls. Hence, in order to investigate in a more comprehensive manner whether Schengen is associated with alterations in supply-reduction strategies we also look at drug prices. Note that while one might expect reductions in drug supply due to effective enforcement to lead to higher drug prices, looking at raw drug prices alone is misleading as suppliers can adjust the purity of the drug in response to enforcement-led changes in drug supply. Hence we look at purity-adjusted prices which are calculated by dividing the total price paid for a unit of a drug by its purity.

For the purpose of this analysis we use data from the *World Drug Report* provided by the United Nations Office on Drugs and Crime (UNODC) online database.<sup>125</sup> Data on seizures on opiates and cocaine is collected by the UNODC through Annual Questionnaire Reports (ARQ). For many countries the data is available virtually from the early 1980s until 2014. In addition we use data on purity and prices from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), which is available from 1995 onwards. The data on prices and purity for opiates is patchy across time and country coverage; hence we use only price and purity data for cocaine, which therefore also serves as the main drug we focus on in our analysis, although we also include seizures of heroin for completeness.

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<sup>125</sup> <https://data.unodc.org/>

Since the data on prices and purity are only available since 1995 and some observations before the country entered the Schengen Area is needed to perform a before and after comparison, we include all European countries in our sample only from the 2000 Schengen enlargement round up to 2007, and those countries that have never been part of the Schengen Area (Ireland, the UK and non-EU countries such as Turkey) which act as comparison groups. We exclude Switzerland from the analysis because even though Switzerland entered the Schengen Area in 2008, it still has running border crossing points to check the flow of goods.

In essence, we run the following econometric model using OLS:

$$y_{it} = \beta_0 + \beta_1 treat_i + \sum_{t=2}^T \beta_t year_t + \delta Schengen_{it} + \gamma C_{it} + \theta_c + \varepsilon_{it} \quad (2)$$

Where  $y_{it}$  in equation (2) represents the natural logarithm of the volume of seized drugs (in kilograms) and the purity-adjusted drug prices in a given country  $i$  at time  $t$ ,  $treat_i$  represents an indicator variable which takes the value 1 if the country is in the treatment group (e.g. country enters Schengen at some point) and  $Schengen_{it}$  is an indicator that takes the value 1 if the country has abolished its border controls as a result of entering the Schengen Area,  $year_t$  is a set of indicator variables that capture common year effects across all countries, and  $\theta_c$  represents a country-specific time-invariant effect. To explain further, the common year effects aim to capture general trends in consumption of a specific drug, whereas the country-fixed effects should take into account time-invariant effects specific to a country, including for instance any differences across countries in reporting drug seizures.  $C_{it}$  is a vector of country-specific time-varying effects, including proxies for demand-side measures, such as total population or GDP per capita, but also the amount of public money spend per capita on policy and public safety.<sup>126</sup> We also include the proportion of young males among the total population and the unemployment rate.

## 2.1 Trends in supply-reduction indicators before and after entering Schengen

Table 2.10 reports associations between the abolishment of internal border controls after entering the Schengen Area and the volume of seized cocaine and heroin and purity-adjusted prices of cocaine. The parameter estimates in column (1) and (2) suggest that on average, countries that entered Schengen after 2000 have increased quantities of seized cocaine and heroin by around 50 to 67 per cent, respectively. To put that into perspective, this means that the pre-Schengen average of around 50kg of seized drugs increased to around 75kg annually, whereas the pre-Schengen average of around 60kg increased to around 100kg annually in the countries under consideration.

Looking at purity-adjusted prices for cocaine, we observe that entering the Schengen Area increases on average the purity-adjusted prices by around nine per cent. That is to say, the empirical findings suggest not only that the amount of seized drugs increased but also the purity-adjusted prices. Even though our analysis cannot fully control for demand-side mechanisms (we include only total population and GDP per capita as demand-side indicators), given the assumption that demand for drugs, in this case cocaine, is price-

<sup>126</sup> Based on COFOG data: [https://stats.oecd.org/Index.aspx?DataSetCode=SNA\\_TABLE11](https://stats.oecd.org/Index.aspx?DataSetCode=SNA_TABLE11)

inelastic, then the simultaneous increase in purity-adjusted prices may suggest a supply-side effect driving the results.

It is important to stress that the parameter estimates presented Table 2.10 represent associations and not necessarily causal effects between entering the Schengen Area and indicators for supply-reduction measures. Nevertheless, our findings highlight the fact that entering the Schengen Area does not hamper the ability of states to effectively combat the illicit drug trade. If there is an effect at all, then the associations reported suggest that supply-reduction efforts may become more efficient when a country enters the Schengen Area.

At first glance, the fact that abolishing border controls may increase the number of drug seizures might seem counterintuitive. That is to say, a lack of border controls would seem to make it easier for drug traffickers to move drugs within the Schengen Area as they do not face the risk of being captured once they pass physical border controls. This argument is made in McCabe (2015). One potential factor which may explain our findings is that better cross-border police cooperation in light of Schengen might have led to better or more frequent information exchange. In addition, police resources that have been performing static border enforcement may have become more efficiently used in combatting drug trafficking.

**Table 2.10: Schengen and indicators of supply-reduction measures.**

	(1)	(2)	(3)
Dependant variable:	In seizures of cocaine	In seizures of heroin	In purity-adjusted price of cocaine
treat	-11.0150 (5.398)**	-10.4487 (2.912)***	-1.2603 (0.466)***
Schengen	0.5348 (0.299)*	0.6798 (0.379)*	0.0927 (0.055)*
Constant	-142.5473 (58.966)**	-98.4652 (27.939)***	31.3854 (4.681)***
<b>Observations</b>	<b>387</b>	<b>598</b>	<b>368</b>
<b>R-squared</b>	<b>0.6908</b>	<b>0.4197</b>	<b>0.6778</b>

**Notes:** Clustered (country) standard errors in parentheses. \*\*\* p<0.01, \*\*p<0.05, \*p<0.1. Models in columns 1 to 3 include the total population and GDP per capita, total population, share of young males, unemployment rate, GINI coefficient and the per capita spend on police and prisons as control variables. The time span of the data includes the years 1995 to 2014. The sample includes all countries from the 2000 Schengen enlargement onwards plus a number of non-Schengen states such as the UK, Ireland, and Turkey.

#### IV - Political cost: associations between Schengen and trust

As outlined in chapter 1, the role of trust is an important enabling factor in the effective working of Schengen. This corresponds to trust at different levels, mainly trust between member states and trust between the public and national and EU institutions. To the best

of our knowledge no comprehensive quantitative data on inter-country trust is available.<sup>127</sup> To address this gap, in this section we use the European Social Survey (ESS) to investigate whether abolishing border controls is associated with changes in public trust. The ESS has asked individuals since 2002 in different regions and countries across Europe about how much they trust others, politicians, the national and European Parliament, the police, and the legal system. Since the data is only available from 2002 onwards, we focus our analysis on the 2007 Schengen enlargement and compare how different measures of trust in these countries have evolved before and after they joined the Schengen Area. As comparison group we use other non-Schengen countries in the same region. In addition, as when analysing the associations between abolishing border controls and crime rates, we also investigate how measures of trust have changed in existing Schengen states after 2007 compared to before 2007. To that end we run the following regression model using OLS:

$$trust_{ict} = \beta_0 + \beta_1 after_t + \beta_2 group_{ict} + \beta_3(after * group)_{ict} + \beta_4 X_{it} + \theta_c + \gamma_{ct} + \varepsilon_{it} \quad (3)$$

Where  $trust_{ict}$  represents a measure of trust for individual  $i$  in country or region  $c$  at time  $t$ ,  $after_t$  is a dummy variable taking the value 1 after 2008, the year after the 2007 Eastern Schengen enlargement.  $group_{ict}$  takes the value 1 if an individual lives in a country belonging to the specific group of interest. As with our analysis of crime rates, we split the sample in two: (1) containing only Eastern Schengen states and Eastern non-Schengen states and (2) containing only Western Schengen states that were in the Schengen Area in 2007. This ensures comparing individuals within similar economic and social environments.  $(after * group)_{ict}$  takes the value 1 for the group of interest after 2007, representing the average change in the trend of the trust measure in relation to Schengen. Hence, parameter estimate  $\beta_1$  reports the change in average trust before and after 2008, whereas parameter estimate  $\beta_3$  reports the change in average trust for individuals in country or region in  $group_{ict}$  net of the change in average trust in individuals not in a country or region covered that group.  $X_{it}$  is a vector of individual demographic and other measures, including gender, age, education, domicile (e.g. urban/rural), citizenship, and whether the individual belongs to an ethnic minority.  $\theta_c$  are country specific effects and  $\gamma_{ct}$  capture country-specific time trends and adjust indirectly for any country-level variables which change over time, including for instance economic output and levels of corruption.

In each of its surveys the ESS asks European citizens about various different measure of trust. In our analysis we include trust based on the variables and questions outlined in Table 2.11, which can be observed over all surveys of the ESS between 2002 and 2014. In order to measure trust in the criminal justice system we combine the variables *trust in police and trust in the legal system*. In order to create a measure of trust in national political institutions we also combine the variables *trust in national parliament and trust in politicians*.<sup>128</sup> The only variable measuring trust in European institutions is the variable *trust in the European Parliament*. In the lack of alternative measures, we use this variable as a proxy measure for trust in European institutions in general.

<sup>127</sup> There are surveys, such as Pew's Global Attitudes Project, that ask respondents about their views of a selected small number of major world countries or their policies. However, these questions are typically limited to a small number of countries and cannot be used for a systematic analysis of inter-country trust within the EU.

<sup>128</sup> Note that we take the average value of both variables combined.

**Table 2.11: Measures of trust included in the ESS, 2002-2014.**

Trust measure	ESS: variables/questions	Scale
General trust	Most people can be trusted or you can't be too careful	0 (you can't be too careful) to 10 (people can be trusted)
Trust in criminal justice system	Trust in the police	0 (no trust at all) to 10 (complete trust)
	Trust in the legal system	0 (no trust at all) to 10 (complete trust)
Trust in national political institutions	Trust in national parliament	0 (no trust at all) to 10 (complete trust)
	Trust in politicians	0 (no trust at all) to 10 (complete trust)
Trust in European institutions	Trust in the European Parliament	0 (no trust at all) to 10 (complete trust)

**Notes:** we combine trust in police and the legal system by taking the average of the two; the same applies to trust in national parliament and trust in politicians.

**1.1 Cross-country trends in different measures of trust (2002-2014)**

The full regression output of estimating equation (3) can be found tables AD.1 and AD.2 in Appendix D. Tables 2.12 and 2.13 summarise the main findings regarding trends in trust over time for newly acceding states that entered the Schengen Area at the end of 2007 and for existing Schengen states before and after 2008, respectively.

For the sample containing new Schengen states and countries that have not (yet) joined Schengen in the same region, we observe on average an increasing trend in trust across the board. This includes general trust, trust in the criminal justice system, trust in national and European institutions. Over the same time period, we observe that, comparing before and after 2008, trust in non-Schengen countries decreased. Similar trends apply to existing Schengen states when we examine the trend before and after 2008. Overall, general trust has increased but tends to be more pronounced in existing Schengen states with direct borders to the newly acceding states entering the area in 2007.

**Table 2.12: Change in trust before and after 2008 for newly acceding Schengen and non-Schengen countries in the same region**

		(1)	(2)	(3)	(4)
<i>Newly acceding countries</i>		<i>general trust</i>	<i>trust in criminal justice system</i>	<i>trust in national institutions</i>	<i>trust in European institutions</i>
<i>Δ before 2008 - after 2008</i>	(1) Non-Schengen	-5.28%	-5.41%	-8.86%	-11.71%
	(2) Schengen	13.62%	6.28%	1.38%	3.55%

	(2)-(1)	18.90%	11.69%	10.24%	15.26%
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Note: based on parameter estimates reported in table AD.1 in Appendix D.

**Table 2.13: Change in trust before and after 2008 for existing Schengen states with direct or no direct borders to newly acceding states entering the area in 2007**

		(1)	(2)	(3)	(4)
<i>Existing Schengen states</i>		<i>general trust</i>	<i>trust in criminal justice system</i>	<i>trust in national institutions</i>	<i>trust in European institutions</i>
$\Delta$ before 2008 - after 2008	(1) No direct border	2.10%	0.37%	7.45%	1.76%
	(2) Direct border	3.93%	2.13%	16.43%	2.11%
(2)-(1)		1.83%	1.76%	8.98%	0.35%

Note: based on parameter estimates reported in table AD.2 in Appendix D.

## 1.2 Cross-regional trends in trust: border versus non-border regions

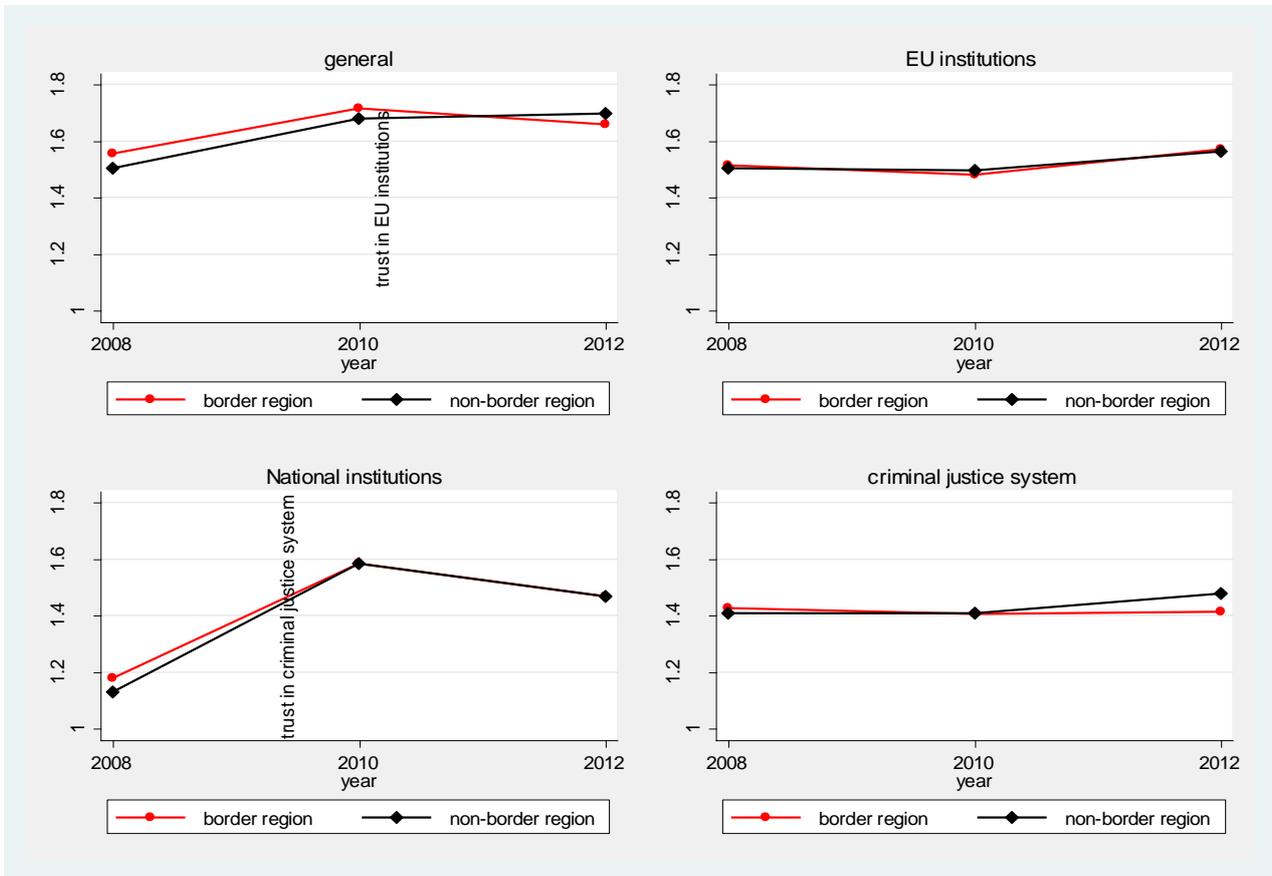
In addition to cross-country trends in different measures of trust, we also examine trends at the regional level by comparing border and non-border regions within countries in light of the 2007 Schengen enlargement. In essence, using the analytical framework outlined in equation (3) we use the regional component from the ESS multilevel data<sup>129</sup> that is available for the years 2008, 2010 and 2012. We adjust the results for demographic factors such as age, gender, education, citizenship and domicile and use the weights provided in the ESS to make the reported values representative. In addition we include regional fixed effects (NUTS 2 or NUTS 1 level) and regional-specific time effects which adjust for all factors that vary over time by region.

In the analysis a region is defined as a 'border region' when its borders have been abolished in the 2007 enlargement, including for instance German–Czech or German–Polish regions with border crossing points. It is important to note that the ESS multilevel reports are not the same NUTS levels for the countries included. Notably, German regions are reported on the NUTS 1 level, whereas for instance regions of the Czech Republic are reported as NUTS 3 regions. This needs to be taken into account when comparing different trends, in that the underlying entity differs.

Figures 2.5 and 2.6 illustrate the fact that, albeit having different levels in existing Schengen states, general trends across different measures of trust are very similar for border and non-border regions for the sample of newly acceding Schengen states, as well for the existing Schengen states.

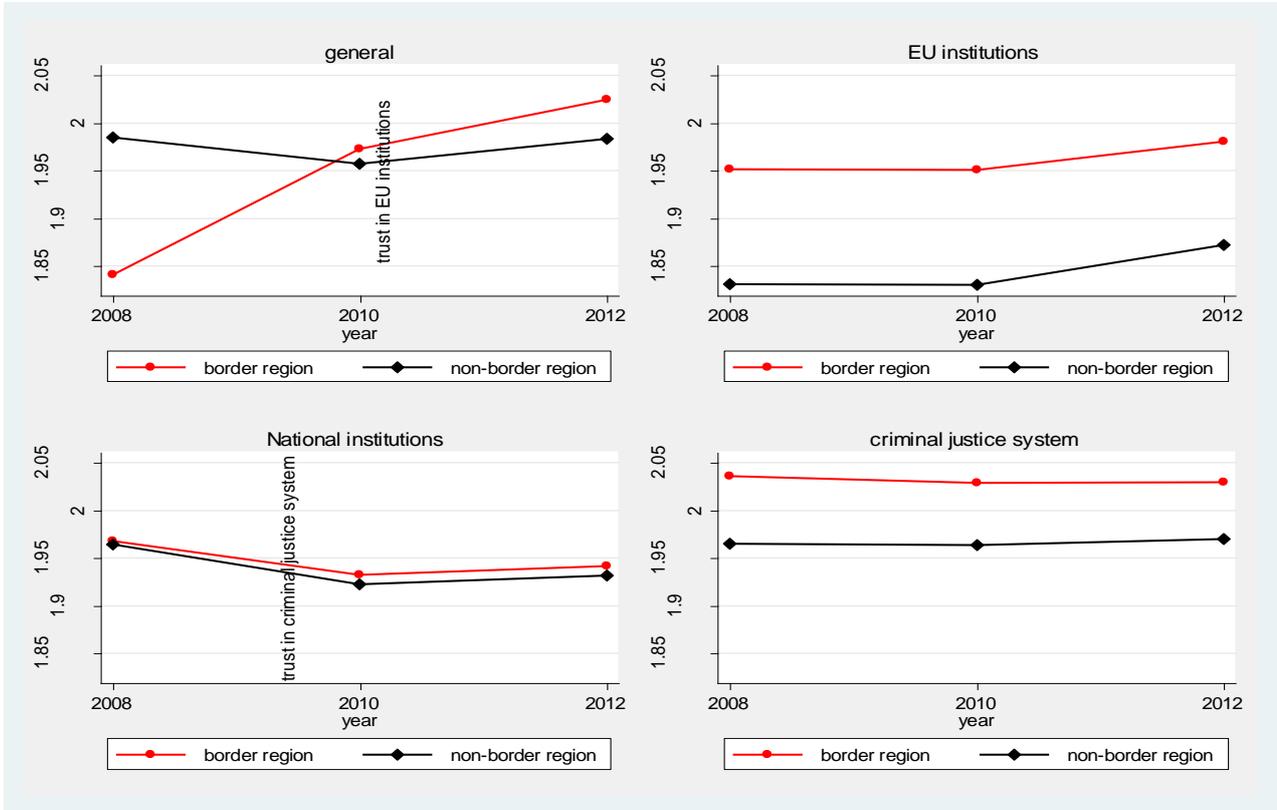
<sup>129</sup> <http://www.europeansocialsurvey.org/data/multilevel/>

**Figure 2.5: Trends for border and non-border regions in different measures of trust for newly acceding states that entered Schengen Area in 2007.**



Note: entries based on ESS multilevel data.

**Figure 2.6: Trends for border and non-border regions in different measures of trust for existing Schengen states with direct borders to newly acceding states that entered Schengen Area in 2007.**



Note: entries based on ESS multilevel data.

## **CHAPTER 3 – OPTIONS FOR CONCERTED ACTION AT EU LEVEL**

As the analysis presented in the previous section and wider academic literature demonstrates, there are positive economic, social and political outcomes associated with the Schengen Agreement. Therefore, it is worth examining possible areas for concerted EU action that may help restore Schengen to its full functioning and thus potentially help reclaim the full extent of Schengen's benefits. This is the objective of this chapter. We reiterate that the inclusion of policy options for more concerted action at the EU level stems from the contextual considerations presented in chapter 1 and take into account the costs discussed in chapter 2. Therefore, these need to be understood as a discussion of responses to a political situation in which trust between member states has been eroded, as has that of the general public in the EU's ability to uphold common standards and policies in the areas of border control, migration and asylum. Therefore, in addition to examining options pertaining to the Schengen governance framework, we dedicate a section to options for EU action in the following three policy areas:

- External border control
- Police and judicial cooperation
- Asylum and migration law

In each of these areas we take stock of existing initiatives and additional possible options along with their possible impact, building on available literature supplemented by interviewee testimonials where available. In each policy area we also consider the acceptability and feasibility of EU action in a given area.

Ultimately, not all options discussed in this chapter should be seen as a pre-requisite for a return to the normal functioning of Schengen. For instance, as laid out in the EC's 'Back to Schengen' roadmap (EC 2016a), the objective is to return to a normally functioning Schengen Area by the end of 2016, although some of the options discussed in this chapter may conceivably require longer to take effect. Accordingly, some options are more likely to have an impact in the near future than others and may therefore be more important, at least from the short-term point of view. This sense of prioritisation can be seen in the EC's exploratory memorandum to its May 2016 recommendation to prolong current internal border controls. The document calls for the following initiatives to be 'in place and fully operational without delay' (EC 2016n): (1) the European Coast and Border Guard, (2) full application of EU asylum law provisions, (3) improved implementation of the emergency relocation scheme, and (4) the EU-Turkey joint action.

## I - Schengen governance framework

**Action in this area could address the following needs arising from the political context surrounding the re-introduction of internal border controls**

- Need to improve the management and monitoring of cross-border flows

**Policy options in this area**

- Improve the enforcement of the existing Schengen acquis.
- Expand the use and functionality of SIS.
- Continue implementing the new Schengen evaluation system.

**Possible impact of undertaken steps**

- The steps discussed below, particularly upgrades to SIS, are likely to contribute to greater exchange of information and, by extension, to addressing some of the current security concerns.
- However, overall, the existing Schengen governance framework appears to be broadly fit for purpose and does not require major modifications. The impact of any steps discussed in this section on the political context leading to the re-introduction of internal border controls is therefore very limited.

This section discusses areas of possible action covered by the Schengen governance framework. Namely, the following three topics: (1) the Schengen evaluation mechanism; (2) SBC provisions pertaining to the re-introduction of internal controls; and (3) Schengen Information System.

### 1. Enforcement of existing rules

Before embarking on introducing new initiatives, it is important to recognise that better use can also be made of existing legislation and instruments by ensuring that member states have implemented all relevant acquis in an appropriate way and/or are compliant with their provisions. With respect to the Schengen acquis, EC's seventh bi-annual report on Schengen (EC 2015k) noted violations of Schengen provisions in terms of ensuring the absence of internal border controls. Most often these pertained to the obligation to ensure that any controls conducted in border areas do not have an effect equivalent to that of formal border controls (Article 23) and to the duty to remove obstacles to traffic flow (Article 24). In response, the EC's use of formal notices, information exchanges, investigations (with the possible escalation to infringement proceedings and their established system of financial sanctions [EC, 2016l]) have been and remain an important tool to help ensure member-state compliance with existing EU law. Improved compliance with Schengen acquis has beneficial impacts on individuals crossing internal borders. However, viewed from the perspective of the needs expressed by those member states that have re-introduced internal border controls, it is difficult to see that better compliance with the Schengen acquis would have any impact on the current political context which has led to the re-introduction of internal border controls.

## 2. SBC rules on the re-introduction of internal controls

Several comments can be made on SBC Articles 25-30 on the basis of interviews and wider literature. Overall, every interviewee who commented on the topic felt that the current system is working well. One interviewee stressed that the provisions of Article 29 and the role of the EU in their introduction helpfully incorporate the need for a multilateral solution, well suited to current challenges, which span the domains of border control, asylum, migration law and so on.<sup>130</sup> Having said which, the interviewee added that this assessment is based on the assumption that current issues can be resolved within two years given that current rules are unable to address an event of a longer duration.

With respect to the provisions of Article 25 and 28, two interviewees pointed out that there was a disconnect between the original aims of Article 25 and Article 28 and the way in which these have been used in the past year. The introduction of the two articles in 2013 did not foresee the current scale of the migrant crisis; rather, the intention was to address member states' needs related to temporary circumstances such as high-profile sport events. However, this was not the reason for which Schengen countries invoked Article 25 and 28 in 2015. The fact that the EC agreed with those re-introductions further demonstrates what one interviewee called a 'shift in the interpretation' of the suspension measures. Importantly, though, this is not a criticism of the suspension measures per se. Articles 25 and 28 also have the advantage of giving member states the possibility of responding to any developments while the EC assesses the need to trigger provisions covered by Article 29.

Peers (2013) assessed the changes to the SBC resulting in the introduction of Article 29. He argued that the new provisions amounted to a compromise between those desiring to increase member state power over the re-imposition of border controls and those advocating a shift towards more EC control. The author welcomed the introduction of greater measures to increase member states' accountability once they decide to re-introduce border controls in the form of reporting requirements and detailed criteria to be applied in the decision process.<sup>131</sup>

The report by Peers also highlighted several potentially problematic areas. First, member states are free to react to an EC decision related to Article 29 controls in any way they deem fit and it is conceivable that the consequences of any divergence in how member states re-

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<sup>130</sup> The existing provisions of Article 29 are mirrored in proposed amendment by the EC to the European Border and Coast Guard Agency proposal, which would provide for a coordinated re-introduction of internal controls if the functioning of the Schengen Area is at risk due to the fact that a member state does not ensure proper follow up to a vulnerability assessment conducted by the agency or does not request sufficient support from the agency to respond to a specific and disproportionate pressure at its external borders.

<sup>131</sup> Member states' adherence to this reporting process is well illustrated by the series of notifications published over the course of the last year. In addition, the EC and Council of the EU have expressed views on the application of these criteria, although these by themselves are not legally binding.

impose border controls may be somewhat chaotic. Second, the applicable rules do not specify what it actually means to re-introduce internal controls and, for instance, how similar their regime should be compared to that of external Schengen borders. Ultimately, however, this is not to suggest that member states' discretion in this area has resulted in systematic issues and there does not appear to be any evidence of that having occurred since the use of Article 29 in May 2016. Instead, it is discussed here as a potential risk which may or may not merit addressing through greater coordination efforts.

### 3. Schengen Information System

The Schengen Information System is another of the 'compensatory' measures introduced to complement the abolition of internal borders and represents a common database of the Schengen Area. In operation since 1995, it enables relevant national authorities to share and access in real-time information on people as well as goods (Delivet 2015). In 2013, a second generation of the system (SIS II) was launched and the management of the new version was transferred to a then recently created agency - the European Agency for the operational management of Large-Scale IT Systems (eu-LISA).<sup>132</sup>

In 2015, eu-LISA (2015) published a report on the technical functioning of SIS II focusing on its central system and communication infrastructure. The report described the technical availability and performance of the system as 'excellent' and did not find any considerable impact on ongoing operations stemming from a small number of reported incidents. In addition, eu-LISA noted a steady increase in the overall use of SIS since its inception in 2013. The latest EC reports on the functioning of Schengen (EC 2015c, 2015k) also highlighted the central role played by SIS and noted several recent initiatives to further improve its performance, such as amendments to the SIRENE (Supplementary Information Request at the National Entry) Manual and new visualisation functionalities. Efforts have also been made to align SIS and Interpol's firearms database.

At the same time, while the EC's seventh bi-annual report (EC 2015k) on Schengen welcomed increases in the use and functionality of SIS, it noted 'significant discrepancies' in the employment of SIS between member states. The eighth Schengen Report (EC 2015c) did not elaborate on this observation other than adding that 'the majority' of member states made good use of advances in the system's functionality, suggesting that there were some member states that did not.

Along similar lines, in its November 2015 resolution (EP 2015c), the European Parliament called on member states to increase the use of available information-exchange tools, including the SIS and VIS (Visa Information System). One interviewee highlighted the contribution of regular evaluations and noted that member states are good at following up on resulting recommendations. An up-to-date indication of the use of the SIS by member states, along with a discussion of further possible areas for improvement, can be expected from the upcoming results of an evaluation of SIS II, projected by the EC to be available in

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<sup>132</sup> In addition to SIS II, the European Agency is currently managing EURODAC and the Visa Information System (VIS) (eu-LISA, n.d.).

the second quarter of 2016.<sup>133</sup> This is in line with the roadmap for the evaluation of SIS II (EC 2016k).

Several additional efforts to improve SIS are envisaged in the foreseeable future and should be acknowledged here. In February 2016 the EC published a report on the ability of SIS to use fingerprint information for identification purposes (EC 2016t). The report concluded that the technology (Automatic Fingerprint Identification System – AFIS) was ready for incorporation into SIS, which paved the way for its implementation.<sup>134</sup> According to a May 2016 memo from the EC, the system will be ready in mid-2017 (EC 2016i). In other developments, the Council of the EU Presidency is preparing an action plan on SIS and foreign terrorist fighters and on addressing notable operational difficulties. The action plan is expected to be published before the presidency's end. Later in 2016, the EC is expected to propose a revision of SIS. This proposal will address, among other issues, the following areas: (1) return of irregular migrants and entry bans, (2) biometric identification through facial images, and (3) alerts for wanted unknown persons (EC 2016i).

The SIS was initially perceived as deficient in terms of data protection and fundamental rights (Centre for the Study of Global Ethics 2010; Parkin 2011). However, more recent official publications document existing data-protection safeguards such as controlled access restricted only to information necessary for the performance of the tasks of relevant authorities (EC 2015a).

The Fundamental Rights Agency (FRA) is currently examining the risks and benefits of holding individuals' personal data, particularly with regards to biometric data, in the SIS (and VIS and Eurodac), although the results are not yet available (FRA, n.d.a). Interestingly, a related survey conducted by the FRA concerning travellers' perception of the use of biometrics showed that most travellers do not view this as a rights violation (FRA 2015).

#### 4. Schengen evaluation and monitoring system

The Schengen evaluation system is among the compensatory measures adopted to complement the abolition of internal borders in the Schengen Area (Delivet 2015), originally set up as a permanent mechanism in 1998 at the intergovernmental level.<sup>135</sup> Following the communitarisation of the Schengen acquis by the Treaty of Amsterdam, the responsibility of the Evaluation Standing Committee was taken over by the Council of the EU's Schengen Evaluation Working Party (SCH-EVAL) (Council of the EU 2014).

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<sup>133</sup> As indicated in a response to an MEP question (EP 2016a).

<sup>134</sup> An interviewee highlighted a current gap that will be targeted. There is no effective search function associated with fingerprint information, meaning that the information is useful only if there is a name attached to the fingerprint that is being checked.

<sup>135</sup> The standing committee on the evaluation and implementation of Schengen. The committee's tasks were (1) assessing the progress of candidate countries towards meeting the conditions for entry, and (2) monitoring the implementation of Schengen acquis in member states that were already parties to the convention (Arbidāne et al. 2016).

In 2013, the Council of the EU adopted a regulation to strengthen the Schengen evaluation mechanism, the first since its early version agreed in the late 1990s (Council of the EU 2013b). According to the new mechanism, the EC is tasked with establishing a multi-annual and an annual work programme, whereby each member states would be evaluated every five years.<sup>136</sup> The evaluations draw on several data collection exercises: (1) a questionnaire prepared by the EC in consultation with member states, Frontex, and Europol to be completed by competent national authorities; (2) on-site visits (both announced and unannounced) conducted by experts designated by member states and EC representatives; and (3), if requested, risk analyses conducted by EU bodies, offices and agencies other than Frontex that are involved in the implementation of the Schengen acquis.

Based on these activities, member state experts and EC representatives prepare evaluation reports and formulate recommendations to remedy any observed deficiencies. These are then submitted to the Council of the EU for consideration.<sup>137</sup> The evaluation system also includes a follow-up mechanism by which a member state found in neglect of its obligations is required to prepare an action plan in response to any recommendations from the Council of the EU. The adequacy of this action plan is subject to EC assessment and its implementation needs to be regularly reported on by the member state. Commenting on the new division of responsibilities between the EC and member states, one interviewee noted that the involvement of the EC has created a more formal and actionable mechanism, although some member states have expressed reservations about a perceived loss of say in the process.

The EC's Seventh Bi-annual Report on Schengen (EC 2015k) commented on the implementation of the new evaluation regime, which started in November 2014. The report noted that the rollout of the new system was preceded by an intensive training and preparation period, based on a commonly agreed curriculum. The report found the first series of evaluation visits very positive, with good cooperation among all engaged parties including the EC, member states and Frontex. With respect to individual features of the new system, the report highlighted the ability to conduct unannounced visits and the fact that individual member-state evaluations are supposed to cover all aspects of Schengen acquis in a relatively short period of time, enabling the evaluators to get a comprehensive snapshot of the situation in a given country. Arbidāne et al. (2016) also argued that innovations in the evaluation mechanism, such as the use of highly qualified experts and unannounced visits, contribute to 'high preparedness standards' for relevant national authorities.

The most recent eighth bi-annual report on Schengen (EC 2015c) offered a somewhat more negative assessment of the evaluation process. The report noted that the success of the evaluation mechanism is to a considerable degree dependent on member states' cooperation and compliance with respect to the Schengen Questionnaire distributed to

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<sup>136</sup> In other words, each year five to seven member states would be evaluated (Malmersjö & Remáč 2016).

<sup>137</sup> Arbidāne et al. (2016) pointed out that one of the reasons implementing powers to adopt recommendations rests with the Council of the EU is to strengthen mutual trust between member states.

relevant national authorities. Regrettably, the record of the member states undergoing an evaluation in 2016 in this regard was rather mixed – half of them failed to return the questionnaire on time (even allowing for extending deadlines). In addition, some of the returned questionnaires either left some questions unanswered or provided information of poor quality and were thus of limited use to the evaluation. To improve the mechanism's effectiveness and efficiency, the EC developed, with input from member states, a Schengen Evaluation Guide (Schengen Committee 2015) and guidelines on the conduct of unannounced visits (Schengen Committee 2014).

## 5. Conclusion

In conclusion, there is little evidence that the current Schengen governance framework is not fit for purpose. Improvements can be made, for instance through better enforcement of existing acquis or expanding the use and functionality of SIS. However, these steps bear little relation to the needs of member states identified in the introduction to this paper and are therefore unlikely to have a major impact on the political context in which internal border controls have been re-introduced.

## II - External border control

**Action in this area could address the following needs arising from the political context surrounding the re-introduction of internal border controls**

- Better management of migratory flows crossing the external border and within the EU.
- Mitigation of terrorist and other security threats.

**Policy options in this area**

- Increase of the institutional capacity dedicated to the protection of external border through the establishment of the European Border and Coast Guard Agency.
- Strengthening of border checks through conducting systematic checks against relevant databases, introducing the Entry-Exit System, and utilising common risk indicators.

**Possible impact of steps undertaken**

- The proposals to strengthen external border checks are expected to result in greater effectiveness of controls. Systematic checks would result in greater demands on resources; the EES could result in savings, once initial one-off costs are absorbed.
- There appear to be substantial limitations on the potential impact of the European Border and Coast Guard (EBCG) Agency. Notably, it would continue to be reliant on member-state resources, which has been an issue for Frontex as well.

Given the needs of member states identified in the contextual discussion of this paper, external border control is an area where more concerted action at the EU level may merit examination. This section discusses two distinct areas of possible action: (1) increases in institutional capacity, and (2) strengthening of external border-check procedures.

### 1. Increase in institutional capacity

In response to the increased migration flows seen at Schengen's external border, the European Union has undertaken a series of steps to improve the ability of relevant authorities to manage pressures encountered. These include hotspots in Italy and Greece (EC 2015c), Frontex joint operations (Triton and Poseidon) and Rapid Border Intervention Teams (RABITs), and a naval military operation Sophia. However, as noted by numerous observers, there are clear limits to the effectiveness of these initiatives due to factors such as implementation issues<sup>138</sup> and the scope and objectives of the intervention.<sup>139</sup>

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<sup>138</sup> This is particularly applicable to hotspots. See, for instance, (EC 2015b, 2016e, 2016s; Kaca, 2016).

<sup>139</sup> For instance, the UK House of Lords found operation Sophia unable to make a meaningful contribution to the deterrence of the flow of migrants and smuggling networks

Overall, however, hotspots and other ongoing initiatives intended to manage migrant flows need to be understood as extraordinary crisis-response measures. In an effort to systematically increase the effectiveness of external border controls and address some of the challenges described above, the EC proposed in December 2015 to establish a new European Border and Coast Guard (EBCG) Agency (EC 2015i). The proposed new agency would replace Frontex and have additional tasks, responsibilities and powers.<sup>140</sup> The EBCG proposal and its features build on the findings of an independent evaluation of Frontex (Frontex 2015a), conducted in 2015, and incorporate recommendations issued by Frontex management in response to the evaluation (Frontex 2015b). The evaluation noted that while Frontex was operating effectively, several areas with room for improvement could be identified. These included a better delineation of the agency's role vis-à-vis national and other EU agencies, lack of monitoring capacity, challenges with access to member-state resources and monitoring of fundamental rights in agency's activities (Frontex 2015a). The area of fundamental rights was also picked up by the European Ombudsman, which recommended the establishment of a complaints mechanism, as suggested in the EBCG proposal.

To help meet the agency's objectives, the proposal envisages the doubling of Frontex's current staff count and the development of a reserve pool of national experts. The latter is supposed to address the current challenge faced by Frontex, which relies on member states' cooperation in responding to its calls for national experts (EC 2016e). However, Carrera and den Hertog (2016) pointed out that the EBCG would still remain dependent on member states' resources and as such falls short of a true European system.<sup>141</sup>

There is no impact assessment available on the EBCG proposal. However, in April 2016, the European Parliament published a study (Rijpma 2016) on the proposal commissioned by the LIBE committee which voiced several concerns. First and foremost, it suggested that the agency's proposed right to intervene and member states' obligation to provide personnel for intervention teams might be in violation of EU treaties and of member states' exclusive control of their internal security. Secondly, the report felt that the dual mandate of coordinating member-state activities and of monitoring those very activities might be problematic to execute. Thirdly, the EP suggested that the agency's third-country cooperation be limited to parties to the Geneva Refugee Convention and the European Convention on Human Rights. The EP report also suggested that several aspects of the proposal required further clarification. These were: (1) division of responsibilities between

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because, according to the authors, the operation is a response to the symptoms rather than the causes of the migrant crisis (House of Lords, 2016).

<sup>140</sup> These include a right to intervene (with the EC's approval) in member states if they do not act on previous EBCG recommendations, increased monitoring capabilities stemming from a dedicated monitoring centre, and a greater role for the agency in migrant returns. In addition, the proposal foresees the establishment of a complaints mechanism (EC 2015i).

<sup>141</sup> In this context, it is worth, however, recalling that this approach is consistent with a 2014 feasibility study on European border guards, which observed that member states' preference was to remain in control of their own border guards. In response, the study recommended a phased approach for any shift in responsibility away from the member-state level.

the agency and other border-management actors; (2) differentiation between the agency's monitoring and the Schengen evaluation mechanism; (3) information to be collected from member states by the agency; and (4) responsibility of the agency's officers operating outside their country of origin. Finally, the EP recommended that the agency's adherence to the Charter of Fundamental Rights be strengthened.

Carrera and den Hertog (2016) also produced an assessment of the EBCG proposal. The authors stressed that the proposed agency would not address what they felt was the principal challenge to the Schengen Area, i.e. deficiencies in the EU's asylum system and inadequate reception conditions. In addition, they foresaw possible challenges in the fact that the agency's strengthened coordination role would lead it to work with (para)military organisations in some member states. In these instances, the authors argued, it was not clear how the compliance of such organisations would be assured and what the reporting lines would be in place in the event of an incident.

In late June 2016, the European Parliament and Council of the EU agreed on a compromise text of the proposal, which addresses some of the points raised above (EP 2016c). The revised version incorporated additional fundamental rights safeguards to its return provisions and increased the role of the agency in return proceedings, though only following member-state decisions. In situations where member states fail to cooperate with the agency or do not take appropriate steps in the event of 'specific and disproportionate' pressure at its external border, the proposal suggests this may be grounds for the re-introduction of internal border controls if the functioning of the Schengen Area is at risk. To that end, the revised text proposes a revision of Article 29 of the SBC that would include the provisions of the ECBG regulation (and member-state non-compliance) as a possible reason for invocation of the article.

## 2. Strengthening of border checks

### 2.1 Systematic checks against relevant databases

In December 2015, the EC put forward a proposal to reinforce checks against relevant databases at external borders with the aim of enhancing overall security within the Schengen Area (EC 2015j). The current provisions for third-country nationals foresee systematic checks as to whether such nationals are 'considered to be a threat to public policy, internal security or the international relations of any of the member states' only at entry via external Schengen borders. At the exit of external borders, checks take place only 'whenever possible'. The new proposal now foresees thorough checks also at the exit, thereby aligning entry and exit requirements, with the consultation of relevant databases becoming binding (EC 2015j). Similar systematic checks are envisaged for persons enjoying the right of free movement under EU law.

As for possible technical impacts, the EC expects these systematic checks to lead to 'further demands on the border management capacity and resources of member states' (EC 2016c). In its explanatory memorandum, the EC does not see any concern with regard to the respect of fundamental rights in relation to the proposal (EC 2015j). Related to the question

of possible fundamental rights issues in this area, one interviewee pointed out that these checks would be passive only and would not result in any retention of information such as travel patterns, while another noted that the FRA is currently looking to update its policing handbook to cover the use of search databases (FRA 2013).

## **2.2 Entry-Exit System**

Alongside the legislative package described above, the EC also published an updated proposal on the establishment of an Entry-Exit System for the external borders of EU member states in April 2016 as part of its proposals on 'smart borders' (EC 2016g). In addition to the three main centralised information systems for EU border management (SIS, VIS and Eurodac), the proposal for an Entry-Exit System (EES) aims to improve external border management as well as contributing to the fight against terrorism. Furthermore, as there is no European-wide provision for the registration of entries and exits of third-country nationals under the current rules (EC 2016c), the EES aims to electronically register when and where third-country nationals, who are admitted for a short stay, enter and exit external Schengen borders (EC 2016o).

The objective of this registration system is to detect overstayers and identify persons who, while within the Schengen Area, are not in possession of identity documents. The EES proposal goes further than the proposal on the reinforcement of checks at external borders insofar as the EES would collect new data from third-country nationals which are not collected under current border provisions, including alphanumerical data as well as fingerprints and facial images. From the perspective of fundamental rights, one interviewee stressed that the current EES proposal represents an improvement over its unfavourably received predecessor in 2013 in that it adopts a much lighter approach in line with recently adopted EU data-protection standards (EU 2016b).

According to an impact assessment accompanying the package, expected advantages of the EES are a positive impact on border-crossing times at entry for travellers using the self-service systems. In addition, the system is expected to improve identification of overstayers and irregular migrants. In terms of the economic cost, it is said that 'the net present value of the EES becomes positive four years after start of operations and the cumulated benefits over ten years are more than 2.5 times the accumulated costs over the same period' (EC 2016d).

The expected disadvantages of the measures are the negative impact on border-crossing times at entry for visa-exempt travellers at first enrolment, although this is mitigated by the use of self-service kiosks. In addition, another disadvantage of the measures are the development costs of the EES, amounting to €395m over the three years that is required to build the system. The changes required to VIS and SIS have been estimated at a €40m development cost, although with no additional operational cost.

## **2.3 Common risk indicators**

In light of the increased risk of terrorist travel, the EC developed a set of common risk indicators (CRIs) in May 2015. These CRIs were set up in order to detect terrorist travel (EC

2016h), particularly in terms of returning terrorist fighters, and to help national border agencies apprehend suspected individuals who could be a threat to public security. In combination with other tools such as the PNR (Passenger Name Record), the CRI is intended to track the movement of offenders to help 'prevent criminals escaping detection by travelling through another member state' (EC 2015g).

CRIs are meant to be used by all member states during external border checks, screening all returnees systematically to assess their level of risk. Details on the content of CRIs are not known, although the EC noted that CRIs are 'based on travel trends, patterns and specific characteristics of those persons', and developed in 'close cooperation' with member states, national experts, the European External Action Service (EEAS), Europol and Frontex (EC 2015j). According to one interviewee, CRIs are planned to be continually developed and regularly updated in accordance to the situation on Schengen's external borders. The CRIs have been rolled out to every member state, along with a handbook and training and awareness-raising developed by Frontex, which has been coordinating the implementation.

The expected advantages of the CRIs is that they help support the work done by national border agencies, improve target checks, and provide further criteria on who is a likely threat (EC 2015k & 2016i). However, criticism has been made on the basis of the criteria used by the CRIs. While these are not known, the possibility of discriminatory profiling in relation of a traveller's country of origin or arrival from certain third countries has been raised (Bigo et al. 2015; Privot 2016). There has not been an official release from the EC specifically addressing concerns surrounding this tool.

### 3. Conclusion

In conclusion, all policy options discussed in this section are directly related to the declared needs of member states as they aim to contribute to improvements in external border management, resulting in improved management of migration and threat detection. However, while assessments of measures intended to strengthen border checks suggest possible positive impacts, the effectiveness of the potential ECBG Agency has been questioned on numerous occasions.

### III - Police and judicial cooperation

**Action in this area could address the following needs arising from the political context surrounding the re-introduction of internal border controls**

- Better management of migratory flows crossing the external Schengen border and within the EU.
- Mitigation of terrorist and other security threats.

**Policy options in this area**

- Improve police and judicial cooperation through (1) closing gaps in the type of information collected, and (2) improving the interoperability of existing information collection systems.

**Possible impact of the steps undertaken**

- Action in this area would likely have a positive impact as some of the issues encountered in the past that contributed to the current challenges would be resolved with the proposed suite of initiatives. Some limitations may stem from the need to consider data protection and privacy needs.
- Action in this area would have a very limited impact on needs linked to the area of asylum, which appears to be the dominant concern.

Given the security-focused nature of member-state concerns discussed in the contextual section of this paper, improvements in cooperation between law-enforcement and judicial authorities represents an area where member states' needs may be addressed through concerted action at the EU level. This section focuses on options surrounding information sharing and exchange between relevant authorities.

There currently exists a multitude of information databases relevant for border management and law enforcement in the European Union and Schengen Area (summarised in Appendix A). While the databases are invaluable tools, gaps in their coverage, interoperability and utilisation, along with wider information-sharing practices among law-enforcement authorities, represent an area with room for improvement (de la Baume & Paravicini 2015).

#### 1. Closing information gaps

According to an EC assessment, current information systems suffer from gaps of information as well as from shortcomings in terms of the actual functionalities of the systems (EC 2016g). Suggested remedies consist of optimising law-enforcement tools and improving the data collected by the various systems, with a view to minimising information gaps. In an effort to close some of these observed gaps in data coverage, the EC suggestions also include the creation of additional information systems. These comprise the Entry-Exit proposal for third-country nationals (discussed in section II.2), the PNR, ETIAS and EPRIS (EC 2016g).

The PNR, approved in April 2016 (Council of the EU 2016a; EC 2016m), is a system by which airlines will have to share passengers' data with national authorities for 'all flights

from third countries to the EU and vice versa'. In combination with other tools such as SIS and common risk indicators (discussed in sections II.4 and III.2), these would track the movement of offenders to help 'prevent criminals escaping detection by travelling through another member state' (EC 2015g). The initial PNR proposal was rejected by the European Parliament Committee on Civil Liberties, Justice and Home Affairs (LIBE) in April 2013 due to concerns over its 'necessity, proportionality, and impact on data protection' (EC 2016g).<sup>142</sup> In December 2015, the European Parliament and Council of the EU reached an agreement on a revised version of the text incorporating additional data protection and privacy safeguards which was subsequently endorsed by the LIBE committee (EP 2015a). However, the approval of the directive was met with continued concerns voiced by organisations such as European Digital Rights (EDRI) (Naranjo 2015) regarding areas such as data protection, retention and access, and discriminatory profiling.<sup>143</sup>

The European Police Records Index System (EPRIS) is intended to give member states' law-enforcement authorities a 'quick overview of whether and possibly where relevant police information on a certain person can be found', a system which would be used in the context of international organised crime or terrorist networks (Council of the EU 2009a). The EC will assess its necessity, technical feasibility and proportionality through the help of a pilot project held in five member states (EC 2016g).

Another option (although not yet formally proposed) is the introduction of the EU Travel Information and Authorisation System (ETIAS), which would register relevant journey information for visa-exempt travellers (Council of the EU 2016c). This would be similar to systems established by other countries, such as ETA in Australia, ESTA (Electronic System for Travel Authorization) in the United States and eTA in Canada. ETIAS is not intended to be used to monitor actual border crossings, but to work alongside the current 'smart borders' proposal.

In the opinion of one interviewee, the development of ETIAS would be a welcome step towards basing travel authorisation and security considerations on personal history and individual information as opposed to on country of citizenship (currently demonstrated by the existence of visa waivers).

## 2. Improving interoperability

In addition to expressing the need to expand data coverage, the EC has also highlighted the fact that current information systems and databases represent a fragmented system in terms of data management for border control and security (EC 2016g). Information is rarely interconnected, can be stored in an inconsistent manner across various databases and may be subject to diverging level of access for relevant authorities. In practical terms, it can be difficult to know which database should be checked in any given situation, exacerbated by

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<sup>142</sup> See also FRA (2011).

<sup>143</sup> Reflecting on the fact that not all forms of profiling are illegal and discriminatory, one interviewee noted the existence of FRA's lists of dos and don'ts for police officers as a useful resource. See e.g. FRA (n.d.b & n.d.c).

the fact that not all member states have access to the same sources.<sup>144</sup> In addition, there are varying levels of implementation of the information system across member states, with some information systems not properly adopted by certain member states.

This fragmentation is not necessarily an issue in itself and can be viewed as a byproduct of data-protection considerations in a process in which systems were developed in different institutional, legal, and policy contexts (EC 2016g).<sup>145</sup> Rather, it is the lack of interoperability that hampers the effectiveness of existing systems. Indeed, as one interviewee suggested, EU information systems may be used by some authorities as a secondary tool at best, precisely due to the fact that they are not integrated as well as they might be.

To improve the interoperability of the systems, the EC proposes focusing on four dimensions of interoperability:

1. having a single search interface that would search several of the information systems at once and combine the results;
2. data that would be registered would only have to be done so once, unlike the current system;
3. a shared biometric matching service;
4. a common repository of data for different information systems (visa applications, entry/exit records, criminal and police records, asylum applications).

To this end, the EC will set up a senior-level Expert Group on Information Systems and Interoperability which will involve EU agencies, national experts and institutional stakeholders (EC 2016g). The objective of this group will be to develop a strategic vision for the overall EU architecture of data management in the domains of border control and security, along with proposals for its implementation. At the time of writing, the mode of reporting of this expert group has not yet been determined.<sup>146</sup>

### 3. Conclusion

In conclusion, initiatives intended to improve the exchange of information between law-enforcement and judicial agencies aim to address existing gaps in European security infrastructure. As such, they are likely to contribute to meeting the needs of member states that have arisen during the political debate surrounding the re-introduction of internal borders. At the same time, they are by themselves unlikely to have a considerable impact on challenges associated with recent migratory flows and related legislation and institutional capacity.

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<sup>144</sup> This consideration includes EU countries whose participation in various aspects of Schengen is optional (Denmark, UK, Ireland) along with Schengen countries which are not members of the EU.

<sup>145</sup> This point was echoed by an interviewee who stressed that tying all systems together would not be desirable from a data-protection perspective.

<sup>146</sup> A group of PPE MEPs raised a parliamentary question to that effect on 3 May. An answer is not available (EP 2016d).

## IV - Asylum and migration

<p><b>Action in this area could address the following needs arising from the political context surrounding the re-introduction of internal border controls</b></p> <ul style="list-style-type: none"><li>- Better management of migratory flows resulting from deficiencies in the EU asylum law and its implementation.</li></ul> <p><b>Policy options in this area</b></p> <ul style="list-style-type: none"><li>- Reform the Dublin system.</li><li>- Improve the EU return policy.</li><li>- Strengthen collaboration on managing irregular migration with transit countries and countries of origins.</li></ul> <p><b>Possible impact of steps undertaken</b></p> <ul style="list-style-type: none"><li>- Proposed and undertaken steps are likely to result in the decrease of pressure on the system in the form of fewer new arrivals.</li><li>- Concerns persist over legality, feasibility and the impact on human rights of some policy options.</li><li>- Deficiencies in inter-member state solidarity are not likely to be addressed substantially.</li></ul>
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As shown by the mention of uncontrolled migratory flows in member states' notifications re-introducing internal border controls, a reform of the EU's asylum system may represent one way of addressing member states' needs in the current crisis. This need to reform the EU's asylum acquis, both as a solution to the current crisis and as a goal in its own right, has also been voiced by numerous commentators (see for example Bertoini & Vitorino 2016; Carrera & den Hertog 2016; Carrera & Guild 2015; Peers 2015a).

Accordingly, this section discusses areas of possible action pertaining to the EU's asylum and migration law. It focuses on efforts to reform the Dublin system but also takes note of other related measures. However, we precede the discussion of policy options by reiterating that there are gaps in the implementation of existing acquis in the area of asylum and migration. The communication on the state of play in the implementation of actions under the EU Agenda on Migration (EC 2016f) examined the implementation of the following six measures:

- Asylum Procedures Directive 2013/32/EU
- Reception Conditions Directive 2013/33/EU
- Qualifications Directive 2011/95/EU
- Directive 2011/51/EU (Long-term residents)
- EURODAC Regulation EU/603/2013
- Return Directive 2008/115/EC

The communication noted that between September 2015 and February 2016 the Commission took 58 decisions to send either a letter of formal notice or a reasoned opinion to a member state deemed in possible breach of its obligations. Only Finland and

Slovakia<sup>147</sup> were not recipients of either type of communication, suggesting that gaps in the implementation of relevant EU law are widespread, although this overview does not provide an indication of the scope of the deficiencies in question.

## 1. Dublin reform

In April 2016, the EC proposed a reform of EU asylum law consisting of three pillars. First, the EC proposed the transformation of the European Asylum Support Office (EASO) into a new EU Asylum Agency, tasked with a greater coordinating role amongst relevant national organisations and with assessing conditions in third countries to inform as to the admissibility of incoming asylum requests (EC 2016p). Secondly, the EC proposed a revision of the Eurodac Regulation, increasing the volume of data collected, the length of their retention and their possible sharing with third countries. Thirdly, the package proposed an amendment to the Dublin Regulation which would prioritise the consideration of an application's admissibility, severely limit benefits to asylum seekers in the event of their secondary movements, and introduce objective criteria for when asylum seekers should be relocated as a solidarity measure among member states (EC 2016q).

The proposal raises a series of questions surrounding its legality, feasibility and objectives. Firstly, several provisions of the proposals may be in violation of the EU Charter and/or previous CJEU rulings (Peers 2016b).<sup>148</sup> In addition, the proposals raise a host of concerns relating to data protection stemming from the envisaged increases in the volume of data collected and stored, in the number of people about whom data would be collected, and in the number of parties the data would be shared with (including, under certain circumstances, non-EU entities). The provisions prioritising considerations about the admissibility of asylum applications also appear to build on the recent controversial EU-Turkey Joint Action Plan (see section IV.2).

Secondly, it is questionable as to what extent some elements of the asylum package are politically feasible. This observation pertains particularly to the proposed corrective relocation mechanism which represents a new attempt at introducing some form of sharing among member states. However, it is not clear why those member states, which had been steadfastly opposed to previous relocation proposals, should want to accept this latest version. In this context, it is also worth consider acceptability of the scheme to asylum seekers and recalling critical assessments of the current relocation scheme set up in September 2015 as they continue to be applicable to the debate surrounding this latest proposal. Both Carrera & Guild (2015) and Peers (2015b) pointed out that the system paid little attention to the preferences of asylum seekers themselves with respect to their country of destination.

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<sup>147</sup> Not counting Denmark, Ireland and the UK, for which the analysis is applicable only in the case of the Eurodac Directive.

<sup>148</sup> This applies particularly to the prioritisation of considerations of admissibility and to several provisions concerning the prevention of secondary movements, which are problematic from the perspective of, among other areas, rights of the child, human dignity, right to an effective remedy, right to access an asylum procedure, and non-refoulement.

The proposed relocation mechanism is intended to relieve some pressure on selected border countries, assuming its feasibility. However, its impact would be limited in that member states would not be allowed to relocate inadmissible cases and so the judgment of admissibility would still rest with the first EU country (Peers 2016b). Lastly, as one interviewee pointed out, although its name might suggest otherwise, the proposed EU Asylum Agency would fall short of an EU decision-making body. As such, while the responsibilities of the new agency would be increased compared to those of the EASO, the role of national authorities in the asylum-processing system would remain largely unchanged, along with its associated challenges. Primary among these remains the issue of how responsibilities and costs are distributed among member states.

## 2. Related policy areas

### 2.1 Return

The effectiveness of the EU's asylum policy is related to the effectiveness of returns. In setting out the EU's Agenda on Migration, the EC acknowledged that the EU's return policy was working 'imperfectly' (EC 2015e) and subsequently published an 'EU Action Plan on return' in September 2015. This action plan outlined measures aimed at rendering the EU return system more effective and was accompanied by a 'Return Handbook' with guidelines and best practices for the execution of return procedures (EC 2015d). The actual policy steps to implement the action plan overlap to a considerable degree with other policy areas discussed elsewhere in the report (see Table AE.1 in Appendix E). One relevant area not previously discussed in this report is policies targeting third countries and their nationals. This topic is briefly discussed below.

### 2.2 Initiatives targeting third countries and their nationals

#### EU-Turkey Joint Action Plan

One possible way of relieving migratory pressures faced by EU border member states is to better manage migratory flows and discourage them in the first place through cooperation mechanisms with third countries and communication efforts targeting third-country nationals. A landmark effort in this area is the EU-Turkey Joint Action Plan, activated in November 2015 (Council of the EU 2015e; EC 2016u). According to provisions agreed in March, irregular migrants travelling from Turkey to Greece will be returned to Turkey. Those arriving in Greece will be processed according to EU Asylum Law, for the purposes of which Turkey is considered a safe country. To compensate for the returns to Turkey, a 1:1 scheme was introduced whereby for one Syrian national returned to Turkey, another Syrian will be resettled from Turkey to the EU. Turkey also agreed to take steps to fight illegal migration from Turkey to the EU. In return, the EU agreed to provide up to €6bn for the Facility for Refugees in Turkey, to reopen selected chapters in the EU-Turkey accession process, and to liberalise the visa regime for Turkey citizens.

The implementation of the EU-Turkey Joint Action Plan had a clear short-term impact, driving down the number of migrants coming into Greece (Reuters 2016). At the same time the agreement has been viewed as highly controversial (Barigazzi 2016), primarily because

it considers Turkey a 'safe' country, an assertion which has been challenged by numerous observers (Amnesty International 2016a & 2016b; Frelick 2016; Peers & Roman 2016; Roman, Baird, & Radcliffe, 2016; Ulusoy 2016) and even in multiple instances by a Greek court (EDAL 2016). Related to the implementation of the deal with Turkey, several international organisations, including the UNHCR (Fleming 2016), Médecins Sans Frontières (MSF 2016b) and Oxfam (Oxfam 2016) have expressed concerns about conditions in Greek hotspots and their use as detention centres as part of a system of forced migrants and asylum seekers. In protest, these organisations decided to suspend some of their activities supporting the hotspots (EurActiv 2016) while Médecins Sans Frontières announced that it would discontinue accepting EU funds in protest at the EU-Turkey deal (MSF 2016a).

In addition to human rights concerns, the EU-Turkey deal faces several potential practical risks to its effectiveness. First, the visa-free regime for Turkey citizens is yet to be approved (Al-Jazeera 2016) and a failure to do so may remove a key building block of the agreement. Second, several authors (e.g. Barigazzi 2016; Shuster 2016) pointed out that the impact of the deal depends to a considerable degree on Turkey's ability and, perhaps more importantly, willingness to implement its part of the agreement.

Furthermore, the agreement addresses the situation only in the Aegean Sea. As one interviewed expert suggested, it is likely that this deal, all else being equal, will result in a diversion of main migrant flows towards the central Mediterranean route, resulting in pressure on Lampedusa and southern Italy in general. Consequently, a solution similar to the EU-Turkey deal which would be applicable in this region would require a deal with North African countries such as Libya, which may be even more problematic.<sup>149</sup>

#### **Other mechanisms targeting third countries**

In addition to the EU-Turkey deal, the European Union has put in place or is working on agreements with other countries to readmit their nationals who were not allowed to stay in the EU. In October 2015, the Council of the EU called on the EC and the EEAS to develop 'tailor-made packages' to incentivise and leverage individual third countries with a view to supporting and encouraging better implementation of readmission arrangements (Council of the EU 2015a). Concurrently, in November 2015, the Council of the EU approved the creation of European Migration Liaison Officers (EMLOs) to be seconded to EU delegations in key third countries with the aim of improving the engagement of third countries in migration issues and of enhancing EU's migration action in those countries (Council of the EU 2015d). As of March 2016, the first series of EMLO vacancies was being advertised for posting in Ethiopia, Niger, Pakistan and Serbia (UK Parliament 2016). Return, readmission, and reintegration with specific respect to Sub-Saharan Africa was one of five major areas covered by the Valetta Migration Action Plan agreed by the Council of the EU in November 2015 (Council of the EU 2015m).

However, despite increasing attention, the European Agenda on Migration progress report noted in February 2016 that readmission rates remained low (EC 2016e). Therefore, continued focus on concluding readmission agreements (e.g. with Algeria and Morocco)

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<sup>149</sup> Peers (2016b) calls any possible deal with Libya 'heinous'.

or at ensuring their effective implementation (e.g. with Pakistan and Sub-Saharan Africa) remains a necessity. Therefore, while in principle greater cooperation with third countries is likely to have a positive impact, this has not yet materialised.

### 3. Conclusion

In conclusion, the policy of reducing the number of arrivals, as exemplified Joint Action Plan with Turkey, is likely to decrease pressure on the EU's asylum system, at least in the short run, thereby addressing member states' needs and priorities with respect to the management of migratory flows in Europe. The proposed reform of the Dublin system may further develop the legal underpinnings of this policy. However, the steps necessary to achieve this goal have given rise to substantial concerns about their legality, feasibility and respect for human rights. In addition, the current set of proposals does not appear able to address deficiencies in solidarity among member states, which in turn raises questions about the extent to which the lack of trust among member states is being addressed.

## CHAPTER 4 – REPORT SUMMARY AND CONCLUSIONS

This study has sought to quantify the economic, social and political costs of the re-introduction of border controls in the Schengen Area and to identify areas where more concerted action at the EU level may yield benefits.

The focus of the study was on civil liberties and home affairs aspects relevant to the LIBE Committee of the European Parliament. The research team employed a mix of quantitative (cost-estimation and econometric modelling) and qualitative (review of relevant documents and interviews with seven stakeholders) methods. The findings of the study are summarised below.

### I - The costs of non-Schengen

The study builds on existing evidence on the costs of non-Schengen which looked at the potential economic costs of re-establishing internal border controls within the Schengen Area. The majority of these studies calculate the costs to the EU economy with regard to reductions in trade and waiting times at border crossings.

Using a bottom-up cost-estimation approach this study estimates what it would cost the Schengen states to rebuild their borders, both in terms of physically rebuilding border crossing points and in terms of annual operating and maintenance costs. Under three scenarios, which differ in assumptions made about the length and scope of the re-establishment of border controls, our estimates suggest that reversing Schengen from a border-free zone to one with border controls could cost the current Schengen states around €0.1–19bn in fixed costs and around €2–4bn in annual operating costs. The former corresponds to around 0.01–0.16 per cent and the latter to around 0.02–0.03 per cent of the GDP of the current Schengen Area.

In addition, the findings suggest that abolishing border controls has not led to increasing levels of crime and decreasing levels of self-reported feelings of security among European citizens. In fact, our empirical findings suggest that Schengen membership may be associated with lower levels of acquisitive crime and better supply-reduction efforts with regard to illicit drug trafficking. However, it is important to note that these empirical findings need to be interpreted as associations only and cannot be read as causal effects of Schengen. Moreover, due to a lack of quantitative data this study has not empirically investigated links between Schengen and border-free travel zones and other types of organised crime such as human trafficking.

Trust in national and European institutions and trust among member states is seen as an important tool in the working of the Schengen governance framework. For the former our study finds positive associations with Schengen. We observe increasing levels of trust in Eastern European member states that entered the Schengen Area in 2007, as well as for Western Schengen states that were members of Schengen before the 2007 enlargement. While it is difficult to express increased levels of trust and decreased levels of crime in

monetary terms, these costs should be considered as potential opportunity costs in light of the re-establishments of border controls.

## **II - Are there potential benefits of more concerted action at EU level within the current Schengen governance framework or by external factors?**

In light of this identification and, where possible, quantification of the costs of non-Schengen, this study discussed a series of possible steps which could be taken to help return the Schengen Area to its full functioning and thus mitigate the potential costs outlined above.

With respect to the Schengen governance framework, our analysis found that current arrangements are largely fit for purpose. There are areas where further steps can be made (and are underway), such as continuing to improve member states' utilisation of and participation in the Schengen evaluation mechanism and the Schengen Information System. However, taking into account the current political context, marked by breakdowns in trust and deficiencies in solidarity among member states, action in this area alone is unlikely to address the fundamental needs and concerns of member states that have led them to re-introduce internal border controls. To achieve this goal, steps in other areas may need to be considered, namely in the domains of external border control, police and judicial cooperation, and asylum and migration acquis.

With respect to external border control, institutional capacity may be increased with the establishment of the European Border and Coast Guard Agency, although the current proposal does not remove challenges stemming from reliance on member-state resources. Greater effectiveness of border checks can be achieved through initiatives such as systematic checks on EU nationals, the Entry-Exit System and the use of common risk indicators.

Existing police and judicial cooperation arrangements would also benefit from improvements in information collection and sharing across agencies and member states. In this regard, two areas for improvement are closing existing data gaps and bringing about greater interoperability of existing (and any new) information systems. However, action in these two areas may have only limited impact on the immediate needs of member states that have led to the reintroduction of internal border controls.

Lastly, action in the area of migration, asylum and external relations may also result in benefits for the Schengen system by addressing underlying member states' concerns, namely the arrival and subsequent unmanaged secondary movements of migrants. This appears to be the case with the currently pursued policy of reducing the number of irregular arrivals, to which a series of recent policy proposals may provide a more developed legal basis. However, this approach leaves a series of major fundamental right concerns unaddressed. In addition, as with the EBCG proposal, it does not appear to have large potential to address questions around solidarity and the reliance on a small number of member states to provide an EU-wide public good.

### III - Implications

The Schengen Agreement, long considered one of the major achievements of the European Union, has come under considerable pressure during the current refugee crisis in Europe. Several member states have felt the need to re-introduce controls along their internal borders, thereby placing limits on internal border-free movement. Several studies have linked suspensions of Schengen to considerable macroeconomic costs, and in this study we further highlight the fact that suspensions of Schengen have substantial direct budgetary costs for the EU and its member states. In addition, other opportunity costs associated with possible breakdowns of the Schengen system include crime, security and trust. Reflecting the fact that Schengen is one of the components of the EU's Area of Freedom, Security and Justice, our analyses showed that Schengen membership is not associated with any increases in crime and may even be associated with decreased crime trends in border regions compared to non-border regions of individual member states. Furthermore, Schengen membership appears to be associated with improved outcomes in terms of illicit drug seizures, a finding which is further corroborated when considering purity-adjusted prices. In terms of other social costs, Schengen membership appears to be positively associated with a range of measurements of trust.

In light of these findings, it seems plausible that, in addition to direct budgetary costs, suspensions of Schengen may result in a range of social and political costs. This report examined a range of policy options for action at the EU level which may help restore Schengen to its full functioning and therefore mitigate the aforementioned and other costs. Our analysis found that the Schengen governance framework itself is broadly fit for purpose, although action in other areas may be necessary. This observation is in line with the needs and objectives of member states declared in connection with the re-introduction of internal border controls, which revolved around the areas of external border control, police and judicial cooperation, and migration and asylum acquis.

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**APPENDIX A – OVERVIEW OF EXISTING INFORMATION EXCHANGE SYSTEMS**

Mechanism Type	System	Year implemented	Status (proposed/under implementation/fully functional)	Used by	Participating countries	Collects information on	Type of information collected
Border Management and Law Enforcement	SIS II	2013	Fully functional	Police; Border guards	Schengen countries, UK/Ireland (criminal alerts only, not immigration alerts)	Wanted or missing persons/ persons under surveillance persons who are not nationals of a member state of the Schengen Area and who are banned from entry into the Schengen territory; information on stolen or missing vehicles and objects such as	Identity papers; vehicle registration certificates; vehicle number plates, etc.
Border Management : EU Nationals and Third Country Nationals	Advance Passenger Information (API)	2004	Fully functional	Border guards	member states	Travellers (via airplanes, rail, maritime)	Number and type of travel document used, nationality, full names, date of birth, border crossing point of entry into the territory of the member states, code of transport, departure and arrival time of the transportation, total number of passengers carried on that transport, and the initial point of embarkation.
	Stolen and Lost Travel Documents Database (SLTD)	2002	Fully functional	INTERPOL National Central Bureaus and law enforcement agencies	170 countries	Travellers	Lost, stolen and revoked travel documents – such as passports, identity cards, UN laissez-passer or visa stamps, including stolen blank travel documents

Border Management : Third Country Nationals Only	EURODAC	2000	Fully functional (new proposed Regulation by the EC, dating May 2016 <sup>150</sup> )	National Officials from member state, and under the new proposal the new EU Border Guard and EU Asylum agencies.	member states, who will be obliged to take and store the information collected under the new proposal.	Asylum seekers; irregular border crossers over 14 years old. Proposed changes would allow information to be taken from children aged 6 and above.	Fingerprints. The proposed change include facial images as well as fingerprints, as well as names, nationalities, place and date of birth, travel document information.
	Entry-Exit System (ESS)	(expected implementation 2020)	Proposal	Border guards	member states	Holders of short-stay visas	Alphanumeric and biometric data
	VIS	2011	Fully functional	External border guards		Applicants for short-stay visas, over 12 years old	Photographs; fingerprints; etc.
Law Enforcement	PNR	2015	Under implementation	Airlines; member states	member states	Travellers (via airplanes, rail, maritime)	All passenger details (name, address, itinerary, payment information, baggage information)
	ECRIS	2012	Fully functional	Central authorities of member states	member states	Criminal convictions	Criminal records
	Europol Information System (EIS) <sup>151</sup>	2006	Fully functional	Law enforcement agencies	member states	Suspected and convicted persons, criminal structures, offences and means used to commit them	Data relating to serious international crime and terrorism (persons, cars, identity documents, etc.)
	Focal Point Traveller Database	2014		Europol, member states			Information on the recruitment and travel of suspect persons

	Prüm	2008	Under implementation	Police	member states (however not all have filled their legal obligations under the Prüm decision).	DNA exchange	Fingerprints: DNA; vehicle registration
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<sup>150</sup> European Commission. 2016f. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of [Regulation (EU) No 604/2013 establishing the criteria and mechanisms for determining the member state responsible for examining an application for international protection lodged in one of the member states by a third-country national or a stateless person] , for identifying an illegally staying third-country national or stateless person and on requests for the comparison with Eurodac data by member states' law enforcement authorities and Europol for law enforcement purposes (recast). COM(2016) 272 final. As of 19 May 2016: <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-272-EN-F1-1.PDF>

<sup>151</sup> Europol. 2013. Europol Information System: Crime reference system for EU law enforcement and cooperation partners. EU Publication Office.

## **APPENDIX B – BUDGET COSTS ESTIMATION METHODOLOGY**

### **1. Distribution of land border crossing points**

To confirm findings of the European Commission (2016b) that approximately 7 per cent of internal Schengen border crossing points are large, processing about 70 per cent of all passengers, we conducted a detailed analysis of the Austrian border. Austria is conveniently located in the centre of Europe and has substantial lowland and mountainous borders, to provide a rough estimate on the distribution of different types of borders. Using a detailed map, we determined 289 individual Austrian border crossing points (i.e. places where a permanent road connected on both sides of the border to further main communications crosses the state border) and established, based on their location (particularly type of road, proximity of large cities, or being on a major trans-European travel paths), into which size category they belong (small/medium/large).

As a rule of thumb, large crossing points are located on motorways and other main roads in areas with substantial road traffic, medium crossing points are on secondary roads in high traffic zones or on main roads in less traffic-intensive areas, and small crossing points are mainly on local roads in sparsely populated areas. The 'small' category also contains local border traffic and tourist crossing points such as the former pedestrian-only border crossing points on the Czech-Polish mountainous border.

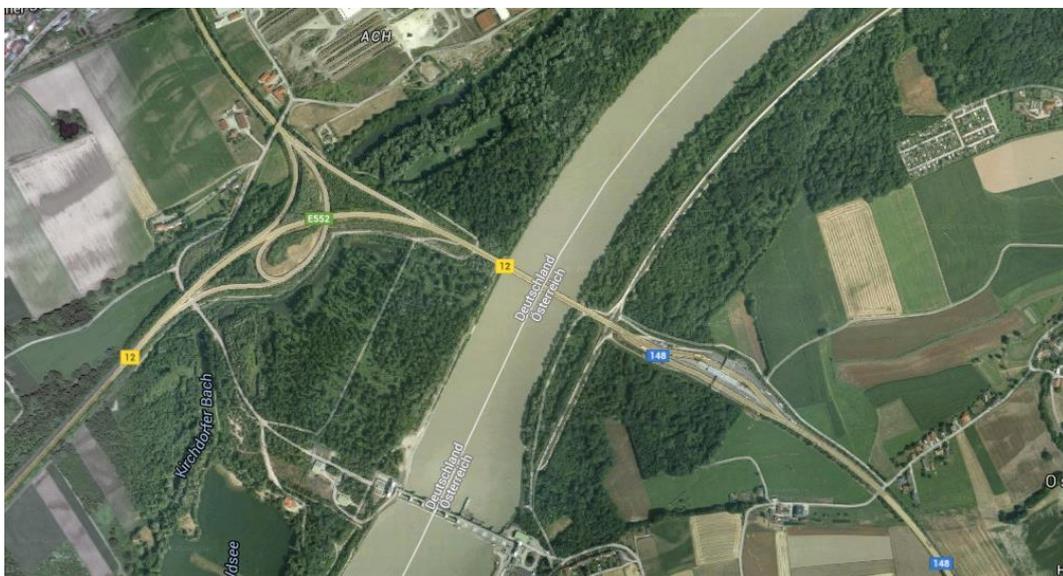
For instance, the border crossing point on highways A1/8 (Austria/Germany) and 155/304 are both considered large border crossings as they lie in close proximity to Salzburg and are on a major east-west traffic route. Similarly, the border crossing point on highway 148/12 is considered large as it is on the same route, but the nearby crossing between Braunau am Inn and Simbach am Inn is only considered a medium point as it is off the main highway, while still being on the east-west route. The same reasoning applies for the crossing at 1/21, which is just off the main highway. Finally, e.g. the border crossing point between Hörschlag and Český Heršlák is considered small as it is located on a local road, not near any large city or major traffic route. The aforementioned crossing points are shown in Figures AB.1 to AB.3. Since it is impossible to distinguish a small border crossing point from a local border traffic or a tourist crossing point, all of those were put in the 'small' category and we further rely on the official documentation to provide detailed distinction used in the cost analysis.

Figure AB.1: Large border crossing point on highway A1/8 (Austria/Germany)



Source: 'Highway A1, Austria.' Map. Google Maps. Google, 08 June 2016. Accessed 08 June 2016.

Figure AB.2: Medium border crossing point between Braunau am Inn and Simbach am Inn (Austria/Germany)



Source: 'Braunau am Inn, Austria.' Map. Google Maps. Google, 08 June 2016. Accessed 08 June 2016.

**Figure AB.3: Small border crossing point between Hörschlag and Český Heršlák (Austria/Czech Republic)**



Source: 'Hörschlag, Austria.' Map. Google Maps. Google, 08 June 2016. Accessed 08 June 2016.

Table AB.1 shows our findings. As we can see, the share of large crossing points (8 per cent) roughly corresponds to the European Commission's estimate (7 per cent).

**Table AB.1: Size of Austrian border crossing points**

Neighbouring country	Size of crossing points		
	Large	Medium	Small <sup>a</sup>
Germany	8	25	53
Czech Republic	1	16	52
Slovakia	3	1	6
Hungary	3	9	21
Slovenia	4	17	34
Italy	2	5	3
Switzerland	2	4	16
Liechtenstein	0	1	3
<b>Total</b>	<b>23</b>	<b>78</b>	<b>188</b>
<b>Total (%)</b>	<b>8%</b>	<b>27%</b>	<b>65%</b>

Notes: Includes local border traffic and tourist border crossing points.

## 2. Number of border crossing points

To obtain a full dataset of internal Schengen border crossing points, we first started with the European Parliament regulation<sup>152</sup> and the recent reports from Austria and France<sup>153</sup> to create a basis of all known land, air, and maritime crossing points. Unlike air and maritime borders which are known in full and will not change, the list of known land border crossing points is patchy with no information on borders between countries that joined Schengen before 2007 (except for Austria and France) such as Netherlands, Denmark, or the whole Scandinavia. A part of the dataset is shown in Table AB.2.

**Table AB.2: Dataset of borders, their length (in km) and number of known border crossing points**

Country	Neighbouring Country	Border characteristic	Border length	Standard land BCP	Local b. t. BCP and Tourist BCP
Austria	Czech Republic	½ mount., ½ lowlands	362	16	35
Austria	Germany	⅔ mount., ⅓ river	784	34	22
Austria	Hungary	Lowlands	366	19	20
Austria	Italy	Mountainous	430	9	0
Austria	Liechtenstein	Mountainous	35	1	2
Austria	Slovakia	Lowlands	91	3	1
Austria	Slovenia	⅔ mount., ⅓ lowlands	330	30	22
Austria	Switzerland	Mountainous	164	16	12
Belgium	France	Lowlands	620	18	-
Belgium	Germany	Lowlands	167	-	-
Belgium	Luxembourg	Lowlands	148	-	-
Belgium	Netherlands	Lowlands	450	-	-

Subsequently, we used statistical methods to estimate the number of border crossing points in areas with no official information. Specifically, we complemented the information on all known land border outposts by border lengths, type of terrain (lowlands, highlands, mountains) and controls for natural borders (particularly rivers which decrease the number of crossing points per 100 km), and determined what would the number of crossing points between any two Schengen countries be based on existing observations,

<sup>152</sup> List of border crossing points referred to in Article 2(8) of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code).

<sup>153</sup> Note from Austrian delegation to Working Party on Frontiers/Mixed Committee no. 14211/15 from 18 November 2015 and Note from French delegation to Working Party on Frontiers/Mixed Committee no. 15181/15 from 10 December 2015.

given the length of their mutual border, its specifications, and the average number of crossing points per 100 km for such type of border. For instance, the Belgian-Dutch or Dutch-German borders are in many ways similar to the French-Belgian border and it is therefore reasonable to expect that the number of border crossing points per 100 km would not be substantially different one border from another. A snapshot of the final dataset is shown in Table AB.3.

**Table AB.3: Dataset of borders, their length (in km) and number of known border crossing points**

Country	Neighbouring Country	Border characteristic	Border length	Standard BCP	Local b. t. BCP and Tourist BCP
Austria	Czech Republic	½ mount., ½ lowlands	362	16	35
Austria	Germany	⅔ mount., ⅓ river	784	34	22
Austria	Hungary	Lowlands	366	19	20
Austria	Italy	Mountainous	430	9	0
Austria	Liechtenstein	Mountainous	35	1	2
Austria	Slovakia	Lowlands	91	3	1
Austria	Slovenia	⅔ mount., ⅓ lowlands	330	30	22
Austria	Switzerland	Mountainous	164	16	12
Belgium	France	Lowlands	620	18	-
Belgium	Germany	Lowlands	167	9 <sup>a</sup>	-
Belgium	Luxembourg	Lowlands	148	8 <sup>a</sup>	-
Belgium	Netherlands	Lowlands	450	25 <sup>a</sup>	-

<sup>a</sup> Estimated

### 3. Cost of border protection

As described in chapter 2, we use Finnish,<sup>154</sup> Latvian,<sup>155</sup> and Swiss<sup>156</sup> data to estimate the operating costs of protecting land borders in Europe, with the number of border crossing points serving as a common denominator used for extrapolation to other countries. The Finnish data are conveniently broken down into document checks, patrolling, law enforcement, and search and rescue emergency operations while the Latvian and Swiss data are only in a form of a bulk estimate for all border control related activities. On the contrary, the Swiss costs are related to existing internal Schengen borders,<sup>157</sup> whereas the

<sup>154</sup> Finnish open data service website, <http://budjetti.vm.fi>.

<sup>155</sup> Latvian State Border Guard, [www.rs.gov.lv](http://www.rs.gov.lv)

<sup>156</sup> Swiss Federal Finance Administration, [www.efv.admin.ch](http://www.efv.admin.ch)

<sup>157</sup> Switzerland is in Schengen but not in the European Union (and its common trade area) therefore continuing border surveillance operations and maintaining operating border outposts at all its borders. In line with the Schengen principles, border force officers at the

Finnish and Latvian figures to external borders only. As discussed earlier, there is no reason to believe that the costs per border crossing point should be substantially different within one country and we can therefore use the costs to protect external borders to estimate equivalent protection of internal borders. The lists of border crossing points for all respective borders are known from the official documentation.

Unfortunately, the Finnish costs are not directly comparable to the Swiss and Latvian ones. In particular, while we were able to extract only patrolling costs related to the land border with Russia, the 1,340 km long border has only 10 permanent border crossing points due to very specific location in subarctic climate and sparsely populated land. Hence, we only use the Finnish data to estimate costs to protect borders in Norway and Sweden, i.e. countries essentially similar to Finland in these characteristics. Additionally, we were not able to extract Latvian expenses related only to the land borders with Belarus and Russia; the Latvian figure thus also contains costs to protect the maritime border at the Baltic sea and we include the 10 officially documented Baltic sea ports among border crossing points used in the calculation. Since the Latvian costs per border crossing point are broadly similar to the Swiss figures, we believe the costs are applicable for extrapolation to other countries. Finally, Germany lists unexpectedly high number of crossing points on their borders with Switzerland.<sup>158</sup> Hence, we slightly reduced the number of border crossing points to reflect this using a manual analysis of the border.<sup>159</sup> Finally, we include main international airports as documented in the European Parliament report in the total number of border crossing points serving as denominator; nevertheless, only land borders are used for extrapolation to other countries.

Using the approach the estimated costs of maintaining border control are €1,283,752 per border crossing in Switzerland, €1,786,187 in Latvia, and €11,045,924 in Finland (PPP adjusted). Combining the Swiss and Latvian estimates we obtain a €1,534,970 estimate to be applied for all but the Scandinavian countries.

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outposts do not perform document checks but may control any passenger as a part of customs duties. We argue that since document checks at land borders constitute just a small proportion of the total costs, the difference in processes does not have a significant impact on our analysis.

<sup>158</sup> This is particularly due to specific typology of the border and approach to cross-border traffic between these countries; unlike in other countries where any two cities practically resembling one split by a country border are divided along the border and connected only at certain points to allow integrated border control, cities along the German-Swiss are generally connected by any street that crosses the border. For instance, Konstanz, a university city with approximately 80,000 inhabitants and a land border of only 2.6km with Switzerland has 7 official border crossing points.

<sup>159</sup> Such reduction is in line with the recent re-introduction of border controls in France; although there are over one hundred roads of any type connecting France and Belgium, the French government only re-introduced 18 border crossing points.

#### 4. Alternative cost modelling using passenger flows

One issue with cost modelling using border crossing points is that it cannot be used to approximate costs related to higher passenger flows through air and maritime borders alone. In particular, Greece, Iceland, and Malta do not have any land borders and Denmark with Estonia have far greater amount of passengers travelling using maritime than air transport so their increased costs of processing more passengers are not appropriately reflected in the main analysis.<sup>160</sup> Hence, we calculate the costs of protecting borders using an alternative approach based on a cost per passenger obtained from the UK, suggesting that each passenger costs £2.8 (€3.61).<sup>161</sup> This figure is excluding patrolling costs which is in line to no new patrolling costs occurring in Greece, Iceland, and Malta should the Schengen Agreement be abolished. To obtain country cost estimates, we simply multiply the per-passenger cost (adjusted for PPP differences) by the total number of passengers travelling through air and maritime transport within the Schengen Area obtained from Eurostat as described in chapter 2.

#### 5. Fixed costs of extending air and maritime border control

**Table AB.4: Air and maritime border equipment costs**

Equipment	Estimated unit cost	Estimated cost per airport		Estimated cost per port	
		Large	Small	Large	Small
Computer <sup>a</sup>	€ 2,000	€24,000- €70,000	€4,000	€14,000- €40,000	€4,000

<sup>160</sup> The overall expenditure data used in our analysis include costs of document and luggage checks at the air and maritime borders as well as their protection so the extrapolation to other borders/countries implicitly contains all relevant expenditure categories, providing reliable estimates for countries with the ratio of internal Schengen land borders to other borders roughly corresponding to the projected increase in air and maritime transport to be checked. This is true for all countries except for Denmark and Estonia because the number of airports is highly correlated with the length of country borders so extrapolation using border crossing points inherently includes costs of higher air passenger flows as well. However, countries with high amount of maritime transport would have their costs understated using this approach. Scandinavian countries (Finland, Norway, and Sweden) form a separate category in this regard as their cost estimates are calculated using the Finnish data.

<sup>161</sup> UK Border Force agency. The data were calculated using a full-cost allocation model, assuming total related costs of £332m and 118.4 million passengers. According to the UK Border Force officials, the calculation includes Home Office headquarters overheads and omits costs allocated to seizures and patrolling. Moreover, the UK Visas & Immigration spending is excluded from the numbers. Exclusion of patrolling costs prevents a direct comparison of the results to the main scenario since these would be underestimated but is necessary for the Greek, Maltian, and Icelandic data to be correct since these countries would not introduce any new border surveillance in case the internal borders controls would be re-introduced.

Passport scanner <sup>a</sup>	€ 1,200	€14,000- €42,000	€2,400	€8,400- €24,000	€2,400
Fingerprints reader <sup>b</sup>	€ 4,000	€48,000- €140,000	€8,000	€28,000- €80,000	€8,000
Facial image scanner <sup>b</sup>	€ 500	€6,000- €21,000	€1,000	€3,500- €10,000	€1,000

a Source: Online search

b Source: Council of the European Union (2009)

## APPENDIX C – SOCIAL COSTS: CRIME AND SECURITY

Table AC.1 and AC.2 report the findings from estimating equation (1) using Ordinary Least Squares (OLS) regressions. Columns (1) to (3) in Table AC.1 include the findings for comparing existing Schengen states with direct borders to the new member states from the 2007 enlargement with existing Schengen states with no direct borders. The parameter estimates confirm the trends depicted in figure 2.2 - there seems to be an overall decline in acquisitive crimes in both border and non-border existing Schengen states in the period after 2008. The parameter estimate for  $after_t$  indicates that on average acquisitive crime in countries with no direct borders to newly acceding Schengen states has decreased on average by around 7 per cent after 2008. In addition, the parameter estimate for the interaction term  $(after * group)_{it}$  means that on average acquisitive crime decreased by 20 per cent for existing Schengen with direct borders to the newly acceding Schengen states. Interestingly, similar trends are observable using victimisation data from the ESS (column 3). The interaction term parameter estimates measures that the self-reported probability of being a victim of burglary or robbery has decreased by around 1.64 percentage points. For homicides we observe a slightly stronger decline in existing non-border Schengen states than for border states, but none of the parameter estimates is statistically significantly different from zero.

Columns (1) to (3) in Table AC.2 include the findings when comparing the newly acceding Schengen states from the 2007 enlargement with non-Schengen states in the same region. Again, the parameter estimates mainly confirm the trends depicted in figure 2.3. However, none of the estimates for police reported crime is statistically significantly different from zero, whereas the estimates using victimisation data from the ESS suggest that self-reported acquisitive crimes have decreased after 2008 on average, by almost 9 percentage points in the newly acceding Schengen states.

**Table AC.1: Cross-country trends in acquisitive crime and homicide rates 2003–2014 – Existing Schengen states**

	(1)	(2)	(3)	(4)
<i>estimation method:</i>	<i>OLS</i>			
<i>sample:</i>	<u>Existing Schengen states</u>			
<i>data source:</i>	<b>Police reported (UNODC)</b>		<b>Victimisation (ESS)</b>	
<i>crime:</i>	<i>acquisitive crime</i>	<i>homicide</i>	<i>acquisitive crime</i>	<i>feeling secure</i>
<i>level:</i>	<i>country</i>		<i>individual</i>	
<i>after<sub>t</sub></i>	-0.0787 (0.091)	-0.1386 (0.387)	-0.0031 (0.001)**	0.0006 (0.002)
<i>group<sub>it</sub></i>	-0.9845 (0.497)**	-1.6671 (1.568)	0.0608 (0.003)***	0.1132 (0.003)***
<i>(after * group)<sub>it</sub></i>	-0.2016 (0.073)***	0.0369 (0.259)	-0.0164 (0.001)***	0.0235 (0.002)***
Constant	26.5201 (7.262)***	39.2901 (24.921)	0.2812 (0.012)***	0.5342 (0.015)***
Observations	168	168	164,907	165,184
R-squared	0.9488	0.4811	0.1494	0.1112

Clustered standard errors in parentheses (country); \*\*\* p<0.01, \*\* p<0.05, \* p<0.10. Models in column (1) to (3) are estimated on the sample of existing Schengen States, whereas group\_it is a dummy taking the value 1 for Germany, Austria, Italy, Sweden and Finland.. Note that the victimisation data stems from the ESS and is weighted using design and population weights. All estimated models control for GDP per capita, the share of young males in the total population, the number of personnel in police and prisons. The specifications using the ESS are on the individual level and adjusted for demographics such as age, gender, education, citizenship or ethnic minority.

**Table AC.2: Cross-country trends in acquisitive crime and homicide rates 2003–2014 – Newly acceding Schengen and non-Schengen states**

	(1)	(2)	(3)	(4)
<i>estimation method:</i>	<i>OLS</i>			
<i>sample:</i>	<b><u>Newly acceding Schengen and non-Schengen states</u></b>			
<i>data source:</i>	<b>Police reported (UNODC)</b>		<b>Victimisation (ESS)</b>	
<i>crime:</i>	<i>acquisitive crime</i>	<i>homicide</i>	<i>acquisitive crime</i>	<i>feeling secure</i>
<i>level:</i>	<i>country</i>		<i>individual</i>	
<i>after<sub>t</sub></i>	-0.1569 (0.222)	-0.1929 (0.222)***	-0.0166 (0.009)*	-0.0788 -0.059
<i>group<sub>it</sub></i>	2.0901 (0.388)***	-0.6728 (0.797)	0.0821 (0.014)***	-0.2218 (0.059)***
<i>(after * group)<sub>it</sub></i>	-0.1405 (0.119)	-0.2391 (0.280)	-0.0953 (0.010)***	0.1059 (0.029)***
Constant	3.0184 (2.293)	3.3726 (3.338)	0.2561 (0.032)***	0.4301 (0.031)***
Observations	228	224	101,956	102,599
R-squared	0.9369	0.8938	0.1488	0.1488

Clustered standard errors in parentheses (country); \*\*\* p<0.01, \*\* p<0.05, \* p<0.10. Models in column (1) to (4) are estimated on the sample of newly acceding European Schengen and non-Schengen States, whereas *group<sub>it</sub>* is a dummy taking the value 1 for Czech Republic, Slovakia, Hungary, Slovenia, Poland, Estonia, Latvia and Lithuania.. Note that the victimisation data stems from the ESS and is weighted using design and population weights. All estimated models control for GDP per capita, the share of young males in the total population, the number of personnel in police and prisons. The specifications using the ESS are on the individual level and adjusted for demographics.

It is important to note that the parameter estimates presented in Table AC.1 and AC.2 represent associations and not causal effects. Nevertheless, after carefully filtering out as many confounding factors as possible, we do not observe increasing crime rates for acquisitive crimes in the existing Schengen states before and after the 2007 enlargement. In fact, the rates are decreasing and stronger for the Schengen states with direct borders.

## APPENDIX D – POLITICAL COSTS: TRUST

Table AD.1: Cross-country trends in different measures of trust 2002–2014 – Newly acceding Schengen and non-Schengen states

	(1)	(2)	(3)	(4)
<i>estimation method:</i>	<i>OLS</i>			
<b><u>sample:</u></b>	<b><u>Newly acceding Schengen and non-Schengen states</u></b>			
<i>measure of trust:</i>	<i>general trust</i>	<i>trust in criminal justice system</i>	<i>trust in national institutions</i>	<i>trust in European institutions</i>
<i>after<sub>t</sub></i>	-0.0528 (0.024)**	-0.0541 (0.025)*	-0.0886 (0.033)*	-0.1171 (0.042)***
<i>group<sub>it</sub></i>	-0.0532 (0.045)	0.0660 (0.026)**	0.0260 (0.033)	-0.4108 (0.085)***
<i>(after * group)<sub>it</sub></i>	0.1890 (0.022)***	0.1169 (0.025)***	0.1024 (0.033)***	0.1526 (0.043)***
Constant	0.9691 (0.034)***	-0.0215 (0.066)	-0.1160 (0.082)	1.0189 (0.053)***
Observations	101,950	95,295	95,295	87,596
R-squared	0.0907	0.2449	0.1751	0.0683

Notes: Clustered standard errors in parentheses (country); \*\*\* p<0.01, \*\* p<0.05, \* p<0.10. Models reported in column (4) to (6) are estimated on the sample of the newly acceding Schengen states from the 2007 enlargement (Czech Republic, Slovakia, Poland, Hungary, Estonia, Latvia, Lithuania) and non-Schengen states in the same region. Note that the trust data stems from the ESS and is weighted using design and population weights. All estimated models control for individual demographics, such as age, gender, education, citizenship, belonging to ethnic minority, domicile (e.g. rural/urban). In addition the specifications control for country fixed and time effects. They also include country-specific time trends that should capture time-varying variables on the country level, such as GDP per capita or different levels of corruption on the country level.

**Table AD.2: Cross-country trends in different measures of trust 2002–2014 – Existing Schengen states with direct and no direct internal borders to newly acceding Schengen states**

	(1)	(2)	(3)	(4)
<i>estimation method:</i>	<i>OLS</i>			
<b>sample:</b>	<b>Existing Schengen states</b>			
<i>measure of trust:</i>	<i>general trust</i>	<i>trust in criminal justice system</i>	<i>trust in national institutions</i>	<i>trust in European institutions</i>
dyear	0.0210 (0.002)***	0.0037 (0.003)	0.0745 (0.004)***	0.0176 (0.003)***
g3	0.0454 (0.004)***	0.3063 (0.002)***	0.1931 (0.003)***	0.3063 (0.002)***
D_g3	0.0183 (0.001)***	0.0176 (0.003)***	0.0898 (0.004)***	0.0035 (0.003)
Constant	1.0581 (0.008)***	0.4995 (0.033)***	0.7832 (0.050)***	0.4933 (0.033)***
Observations	164,767	158,493	158,493	158,493
R-squared	0.0699	0.1079	0.1472	0.1079

Notes: Clustered standard errors in parentheses (country); \*\*\* p<0.01, \*\* p<0.05, \* p<0.10. Models in column (1) to (4) are estimated on the sample of existing Schengen States, whereas *group\_it* is a dummy taking the value 1 for Germany, Austria, Italy, Sweden and Finland. Note that the trust data stems from the ESS and is weighted using design and population weights. All estimated models control for individual demographics, such as age, gender, education, citizenship, belonging to ethnic minority, domicile (e.g. rural/urban). In addition the specifications control for country fixed and time effects. They also include country-specific time trends that should capture time-varying variables on the country level, such as GDP per capita or different levels of corruption on the country level.

## APPENDIX E – OVERVIEW OF COMPONENTS OF THE EU ACTION PLAN ON RETURN

Table AE.1. Overlap between the Action Plan on Return with respect to EU return system and other policy areas

Action Plan Area/objective	Concrete policy option	Relevant section of chapter 3
Stronger enforcement of EU rules (i.e. Return Directive)	Implementation of existing acquis, use of infringement procedure as necessary	I.1; IV
Enhanced sharing of information to enforce return	Creation of new information databases and improvements to the existing ones	III
	Reform of Eurodac Regulation	IV.1
	Smart Borders package	II.2
Strengthening the role and mandate of Frontex	Proposal to establish European Border and Coast Guard Agency	II.1
An integrated system of return management	Reform of the Dublin system	IV.1
	Policies targeting third countries and their nationals	IV.2
Enhance voluntary return	Policies targeting third countries and their nationals	IV.2



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This study identifies the costs, in economic, social and political terms, of the (temporary) reintroduction of border controls between the Schengen Member States, with a special focus on civil liberties, justice and home affairs aspects. It recommends more concerted action at EU level with a view to returning to a fully functioning Schengen Area. Regaining inter-Member State and citizen's' trust in the EU's ability to tackle the deficiencies exposed by the refugee crisis should be an immediate priority. More concerted action at EU level is necessary to foster solidarity and cooperation between Member State authorities. Their work should also be supported through EU agencies, such as the European Border and Coast Guard, Europol, Eurojust and the European Asylum Support Office. The need for changes to the current Schengen governance framework should be further considered based on compliance with the conditions allowing five Member States to maintain their internal border controls until November 2016.

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