EUROPEAN
COMMISSION

Brussels, XXX
SWD(2018) 50

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

Proposal for a Directive of the European Parliament and the Council on the issue of covered bonds and covered bond public supervision and amending Directive 2009/65/EC and Directive 2014/59/EU

And

Proposal for a Regulation of the European Parliament and the Council on amending Regulation(EU) No 575/2013 as regards exposures in the form of covered bonds

{COM(2018) 94} - {COM(2018) 93} - {SWD(2018) 51}

1. INTRODUCTION

One of the Commission's most important objectives is to stimulate investment and create jobs. To achieve that, the Commission has launched a number of initiatives to ensure that the financial system contributes fully in that regard. First among those is the Capital Markets Union (CMU), which contains a series of initiatives aimed at unlocking funding for Europe's growth. The key objective of CMU is to stimulate market financing. However, as bank financing is currently by far the most important funding channel in Europe, one of the actions of the CMU is to further leverage banking capacity to support the wider economy. One way to achieve that is to ensure that banks have a broad range of safe and efficient funding tools at their disposal.

Covered bonds are important in that respect. Covered bonds are bonds issued by banks that are secured by earmarked assets on which investors have a priority claim. They are an important source of cheap and long-term funding for banks. They facilitate the financing of mortgage loans and public sector loans, thereby supporting lending more broadly.

However, covered bonds are unevenly developed across the Single Market. They are very important in some Member States, less so in others. Furthermore, covered bonds are only partially addressed in EU law. Whereas covered bonds benefit from a preferential prudential and regulatory treatment in several respects in light of their lower risks – e.g. banks investing in covered bonds do not have to set aside as much regulatory capital as when they invest in other assets – what constitutes a covered bond is not comprehensively addressed in EU law. Instead, the various preferential treatments are granted to covered bonds as defined in the UCITS directive (2009/65/EC). That definition was, however, not drafted with this broader purpose in mind but had a more limited scope (limiting what UCITS could invest in).

The desire to further leverage banking capacity, the uneven market development of covered bonds and their incomplete regulatory treatment at EU level has given rise to questions as to whether a review of the EU legislative framework is needed.

The Commission carried out a public consultation on covered bonds between September 2015 and January 2016, which already gave cautious support to EU wide harmonization. Since then, there has been a convergence of views on the merits of EU action. In December 2016, the EBA published recommendations on how to harmonise rules governing covered bonds. In March 2017, the Commission received a study commissioned from a third party (ICF) highlighting the benefits and costs of a possible legislative framework on covered bonds. The co-legislators have also expressed their support for addressing covered bonds. The European Parliament (EP) has called for the establishment of a European legislative framework on covered bonds.[1] Member States have also been supportive of further action subject to it being principle-based and in line with the EBA advice.[2]

As a result, the Commission announced as part of the CMU Mid-term Review its intention to propose a legislative framework for covered bonds.[3] In his latest State of the Union speech,

---

1 European Parliament, (2017).

2 Financial Services Committee, 12 July 2017.

3 European Commission (2017a). The Mid-term Review also announced that the Commission will explore the possibility of developing European Secured Notes (ESNs) as an instrument using many of the key structural features of covered bonds, but aimed at SME bank loans and infrastructure bank loans. While the covered bond and ESN initiatives are closely linked, the case for ESNs is being assessed in parallel and according to a different timetable. As ESNs are backed by more risky assets, they will need further assessment and will

the President of the European Commission confirmed that an enabling framework for covered bonds was part of the initiatives to be launched or completed by end-2018.[4]

The purpose of this impact assessment is therefore to assess the case for action (chapter 2), set the objectives that a new framework should aim to achieve (chapter 3) and to assess and compare different options for achieving those objectives (chapters 4-6).

2. POLICY CONTEXT, PROBLEM DEFINITION AND SUBSIDIARITY

2.1. Background and context

What are covered bonds?

Covered bonds are debt obligations issued by credit institutions and secured on the back of a ring-fenced pool of assets (the "cover pool" or "cover assets") which bondholders have direct recourse to as preferred creditors. Bondholders remain at the same time entitled to claim against the issuing entity or an affiliated entity of the issuer as ordinary creditors for any residual amounts not fully settled with the liquidation of the cover assets. This double claim against the cover pool and the issuer is denominated the "dual recourse" mechanism. Furthermore, the cover pool usually comprises high quality assets (e.g. mortgage loans and public sector debt). The issuer is under an obligation to ensure that the value of the assets in the cover pool at least matches at all times the value of the covered bonds and to replace assets that become non-performing, or otherwise do not meet the relevant eligibility criteria. These features reduce the risk of investments in covered bonds, thus providing a rationale for the beneficial regulatory capital requirements as set out in Article 129 CRR and for other favourable treatments envisaged in other pieces of EU legislation.

Covered bonds are among the largest debt markets in the EU. They represent an important source of cheap and long-term funding for banks. They facilitate the refinancing of mortgage loans and public sector loans, thereby supporting lending more broadly. For investors they represent a safe investment, as in case of repayment problems they are covered by both the assets in the cover pool and by the issuer (dual recourse). The lower risk profile of the asset pool and the dual recourse mechanism reduce the required rate of return for investors and enable mortgage banks to raise finance more cheaply than by just issuing unsecured bonds. This should normally increase the supply of funding available to the economy, in particular mortgages. Although residential mortgages finance predominantly real estate, entrepreneurs can also use their residential property as collateral for financing their professional activity; commercial mortgages finance business facilities (offices, productive capacity and shopping malls, etc); public sector loans finance local infrastructure (like schools, hospitals etc) and possibly guarantee SME loans; finally, covered bonds in some cases also refinance other assets such as SME loans and infrastructure loans. Covered bonds have therefore wider financing benefits beyond banks and are important to fulfil broader CMU objectives. Moreover, covered bonds proved to be a stable source of funding for banks during the financial crisis compared to the more volatile senior unsecured debt issued by banks.

---

have a separate impact assessment process to assess the merits of legislative action. In light of the above, the SME issue is not within the scope of the present impact assessment.

[4] European Commission, (2017b).

The EBA mandates and Reports

On 1 July 2014, the EBA issued a 'Report on EU covered bond frameworks and capital treatment' (2014 EBA report)[5] which, in line with the mandate given to the EBA in the ESRB recommendation on the funding of credit institutions from December 2012 (ESRB recommendation[6]), identified best practices with a view to ensuring robust and consistent frameworks for covered bonds across the EU. The report also contained the EBA's opinion on the adequacy of the current prudential treatment of covered bonds, following a call for advice from the Commission from December 2013 based on the Article 503 of the CRR.

As a follow-up to the identification of best practices, the ESRB recommended to the EBA to monitor the functioning of the market for covered bonds by reference to these best practices for a period of 2 years. By 2016, the EBA was requested to deliver a final report to the ESRB and to the Council and the Commission containing an assessment of the functioning of the market for covered bonds under the best practice principles and its view on recommended further action if deemed desirable.

In response to this recommendation, in December 2016 the EBA issued a "Report on covered bonds - Recommendations on harmonisation of covered bond frameworks in the EU".[7] The report was the subject of a public hearing on November 2016. This Report includes a comprehensive analysis of regulatory developments in covered bond frameworks in individual Member States, with a particular focus on the level of alignment with the EBA's best practices. It also provides an assessment of the latest market trends, as well as regulatory developments that have taken place at the European level. Building on the results of the analysis, the report advocates for EU legislative action for harmonizing covered bonds at EU level and presents a comprehensive proposal to this purpose.

The EP Report

On 4th July 2017, the European Parliament approved an own-initiative report on covered bonds titled "Towards a pan-European covered bonds framework"[8]. The Report has been presented before the Committee on Economic and Monetary Affairs (ECON) and the Plenary by the Rapporteur Bernd LUCKE (ECR/DE). The report supports the harmonisation of covered bonds at EU level, calling the Commission to present a principles-based Directive for a European Covered Bonds framework. The report recognizes that covered bonds are sound financial products and that some national frameworks are already very successful. It also raises the concern that a fully-fledged harmonisation aiming at a one-size-fits-all European model would have negative consequences. It therefore proposes a principle-based approach based on high quality standards and best practices but leaving means and ways to Member States to adapt the EU framework to their national specificities.

The ICF study

In 2016 the Commission launched a tender for a study on covered bonds to assess their current market performance and the costs and benefits of potential EU action. The study has

5 EBA (2014).

6 ESRB (2012).

7 EBA (2016).

8 European Parliament Report (2017).

been awarded to the consultancy ICF, which delivered their final report in March 2017[9]. The Commission published it in May 2017. On the basis of a literature review; qualitative and quantitative analysis and stakeholder interviews (issuers, investors, supervisors…), the study documents a number of costs and benefits of EU action. In terms of costs, these relate to: i) costs for issuers to establish new covered bond programmes; ii) transition costs; and iii) risks of undermining well-functioning national markets. As regards benefits, one key benefit of the new EU framework would be a reduction of the overall default probability of covered bonds due to the strengthening of the credit characteristics of the instrument. This credit strengthening would translate into materially lower borrowing costs for EU credit institutions issuing covered bonds of several basis points. The study also highlights other benefits (e.g. reducing regulatory fragmentation; facilitating reduction of asset and liability mismatches; and, facilitating capital market access to small and medium-sized issuers), though it does not quantify them. Overall, the study finds that benefits exceed costs and therefore EU action is justified.

The European Secured Note (ESN) initiative

The European Secured Note (ESN) is defined as a dual-recourse financial instrument on an issuer's balance sheet applying the basic structural characteristics of covered bonds to two non-traditional cover pool assets - SME bank loans and infrastructure bank loans. The Communication on the Mid-term Review of the Capital Markets Union (CMU) Action Plan of June 2017 announced that along with an EU framework on covered bonds, the Commission will assess the case for ESNs in order to strengthen the banking sector's lending capacity and support the wider economy. While the covered bond and ESN initiatives are closely linked (as the ESNs make use of most structural features of covered bonds and transfer the covered bond technology to non-mortgage cover pools), it has been decided to follow a separate parallel path for ESN in order to protect the strong reputation covered bonds earned in the last decades in European financial markets. As ESNs are backed by more risky assets, they would inevitably represent a riskier instrument and their perceived higher risk could affect the perception of traditional covered bonds. Member States, supervisors and market stakeholders all have expressed their reserves against connecting the two instruments. The opportunity of an EU initiative on ESN will therefore be subject to a separate impact assessment. This approach is shared by the co-legislators. Following the ECOFIN Council Conclusions of 11 July[10], Member States discussed ESNs at the Financial Services Committee meeting on 12 July based on a non-paper prepared by the Commission. Member States were overall supportive of the ESN initiative subject to clear differentiation of ESNs from covered bonds and further analysis. In its report on a pan-European covered bonds framework issued in July[11], the European Parliament (EP) has expressed support for the establishment of ESNs and called on the Commission to develop principles of a legal framework for ESNs.

In order to prepare a specific impact assessment[12], the ESN work stream will build on the EBA advice (to be delivered by 30 April 2018), on a feasibility study by an external contractor (to be delivered on 30 April 2018) and on data collected with the help of the ECBC

9 ICF (2017).

10 Council conclusions on the Commission Communication on the mid-term review of the Capital Markets Union Action Plan, 11.07.2017

11 European parliament, Towards a pan-European covered bonds framework, (2017/2005(INI)), 26.06.2017

12 Issues that need to be evaluated are the following: the potential demand for ESNs, default rates of SME and infrastructure bank loans, cover pool quality and eligibility criteria, geographical diversification of the cover pool, interest of international investors, liquidity risk profile, data infrastructure, system of supervision and administration, potential non-traditional amortisation structures and effect on markets for other asset classes.

Task Force on ESNs. The Commission will also launch an open public consultation on ESNs by the end of 2017.

2.1.1. Nature and size of the market concerned

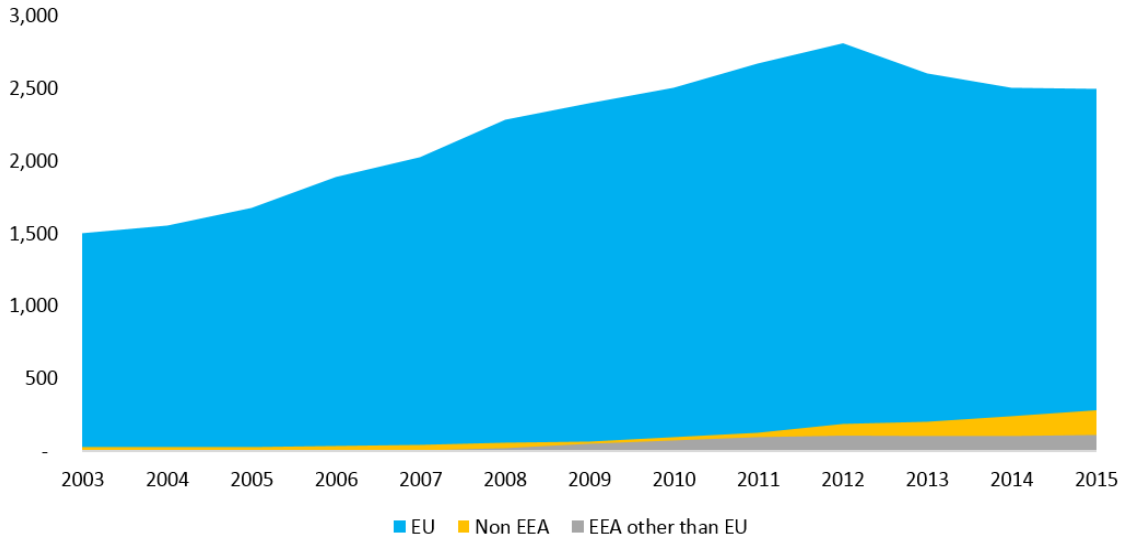
As outlined above, covered bonds are an important funding tool that has been subject to significant policy attention recently. This section further describes covered bond markets in terms of the size of the market; who issues and invests in covered bonds; and, the type of assets used as collateral. This section also compares covered bond issuance with another funding tool of banks, i.e. securitisation.

Outstanding volumes

According to information compiled by ICF[13], as of December 2015, the outstanding volume of covered bonds reached EUR2.5 trillion at the global level, of which EUR2.1 trillion has been issued by EU resident institutions. To put it into perspective, this figure amounts to about 1.2 times the outstanding volume of corporate bonds issued by non-financial institutions in the EU (which stood at EUR1.8 trillion in 2015) and 4.8 per cent of the aggregate balance sheet of EU banks (EUR43.3 trillion in 2015).

Covered bonds are predominantly an EU instrument. The EU represents 84 per cent of the global outstanding volumes, followed by 11 per cent of non-EEA countries and 5 per cent of non-EU EEA countries. Although still comparatively small in absolute terms, the non-EEA markets have recently been growing rapidly: between 2003 and 2015, non-EEA markets posted a compound annual growth rate of 20 per cent compared to 3 per cent for the EU. One of the reasons why the EU has a comparatively large market for covered bonds is the fact that many Member States have longstanding enabling legal framework for covered bonds in place.

Figure 1. Evolution of Total Outstanding Covered Bonds [2003-2015, in EUR billion]



Source: ICF, 2017

As shown in Figure 1, the global covered bond market has grown steadily for more than 20 years, in particular since 1995. From roughly 2003 until the financial crisis, the twin drivers of overall market growth were the introduction of covered bond regimes in many new

[13] Data in this section come from ICF (2017).

jurisdictions and the tightening spread environment. During the financial crisis the issuance level was relatively high as issuers relied more heavily on covered bond funding than on unsecured bonds. Some of the increase in market size from 2007 to its peak in 2012 can be attributed to issuers switching their funding sources from unsecured to secured funding. The other main driver of higher reported levels of covered bonds outstanding in the same period was the increase in bonds issued purely for use as collateral to access the funding made available by the ECB[14]. Since 2012, the global market size has shrunk slightly: outstanding bonds contracted by 7 per cent in 2013 before declining more slowly to €2.5 trillion in 2015. This global decrease was driven by a decline in EU covered bonds, with the rest of the world still experiencing a slow but steady increase in the size of covered bond markets. Anecdotally, the main reasons for the decline in the EU covered bond market have been a normalisation of the spread differential between covered and unsecured bank bonds, less use of central bank emergency funding facilities (therefore less need for covered bonds as collateral), low levels of growth in bank lending in general, and mortgage lending in particular, and regulatory developments including the need for banks to raise more funding in the form of capital (and other bail-in eligible liabilities).

As shown in figure 2, within the EU, Germany remains the largest market in terms of outstanding volume (384 bn EUR), closely followed by Denmark (383 bn EUR), France (323 bn EUR), Spain (281 bn EUR), Sweden (222 bn EUR), Italy (131 bn EUR) and the UK (121 bn EUR). The four largest markets still account for almost two-thirds of the EU market in 2015 (vs. 97 per cent in 2003).

Figure 2. Size of the seven largest markets in terms of outstanding volumes (2015)

Source: ICF, 2017

Issuance

As of 2015, there were 317 active covered bond issuers[15] globally (261 in the EU) and 434 covered bond programmes, in 30 countries. Within the EU, there has been an increase in the number of issuers from 139 in 2003 to 261 in 2015. Germany is still the top EU country in terms of the number of credit institutions issuing covered bonds (79). Spain has 31 active issuers, followed by Austria (27), France (19), the UK (15) and Italy (13). There are also substantial differences between the countries in terms of the typical size of the issuer.

[14] Within the Eurosystem Collateral Data, covered bonds make up 19 per cent of assets used as collateral.

[15] Issuers of covered bonds can only be credit institutions.

Up until 2012, the annual level of issuance in the EU increased substantially, rising from €394 billion in 2003 to €613 billion in 2011. This upward trend halted temporarily in 2012 and 2013 (-2 per cent and -39 per cent respectively). The market quickly recovered – with year-on-year growth rates standing at +4 per cent and +20 per cent in 2014 and 2015 respectively – to reach a level of €454 billion.

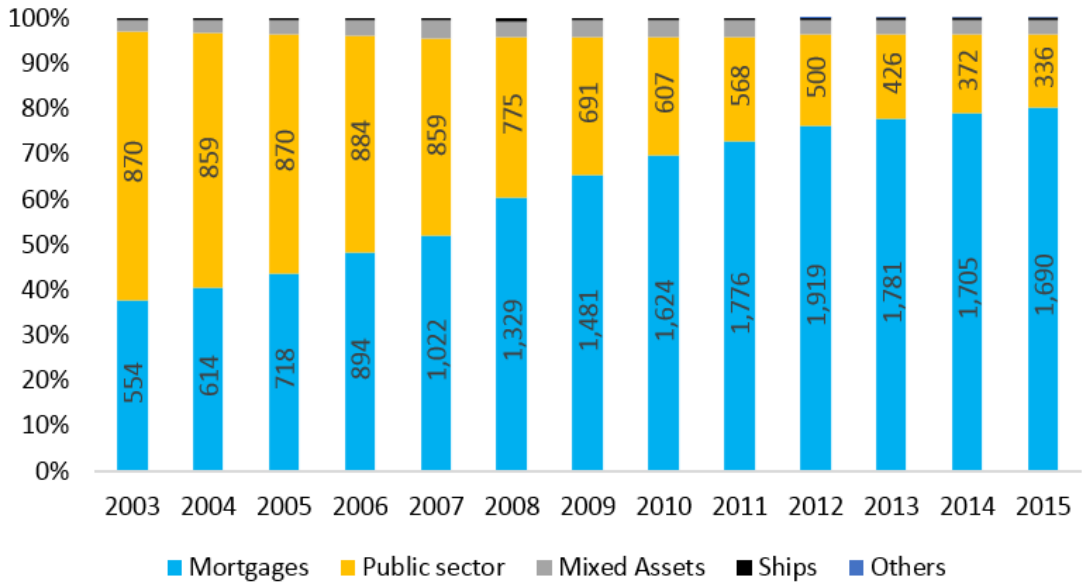
Denmark is the country with the largest new gross issuance volumes in 2015 (EUR164bn). Other major issuers are Sweden (EUR61bn), Germany (EUR58bn), France (EUR45bn), Spain (EUR42bn) and Italy (EUR29bn).

Non-EEA issuers are catching up and their share increased from 1 per cent in 2003 to 11 per cent in 2015. The number of countries outside the EEA with active covered bond markets has grown: Singapore is the latest 2015 addition to a list already containing Australia, Canada, New Zealand, Switzerland, South Korea and Turkey. The US is not active in the market of covered bonds due to the different structure of their mortgage market which is dominated by the two public agencies Fannie Mae and Freddie Mac.

Composition of the cover pool

In terms of outstanding volumes, the two traditional asset classes still dominate the EU market: mortgages represented 80 per cent of the cover pool in outstanding covered bonds in 2015 and public sector debt 16 per cent, the rest accounting for other assets such as ships.

Figure 3. Composition of the cover pool in EU countries' outstanding covered bonds [2003-2015], figures in bars are in € billion



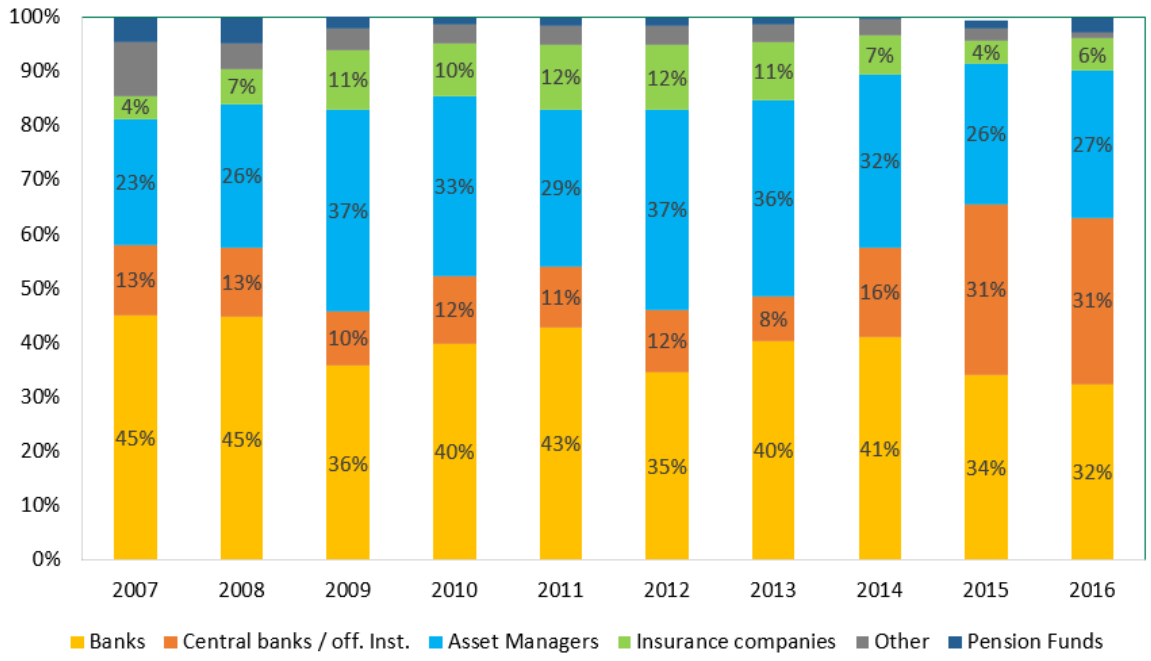
Source: ICF, 2017

As shown in figure 3, the composition of the cover pool in the EU is gradually shifting away from public sector debt towards mortgage debt. Public sector debt represented 59 per cent of total assets in 2003 and fell to 16 per cent in 2015, while mortgages increased from 38 per cent in 2003 to 80 per cent in 2015. This trend is confirmed by the composition of the cover pool of new issuances.

Investor base

Banks and central banks are the most important investors in covered bonds, accounting for almost two-thirds of the markets (32 per cent and 31 per cent each in 2016), as shown in Figure 4. Asset managers', insurance companies' and pension funds' investment in this market account for the remaining third (about 36 per cent in 2016). Retail investors do not play a significant role in this market (they are included in the category others which itself represents only 1%). This is mainly explained by the fact that in most cases the minimum denomination of covered bonds is 100.000 EUR. The two countries with the largest covered bond markets (Germany and Denmark) allow retail investors to directly invest in covered bonds. While in Denmark, in spite of this possibility, retail investors do not invest in covered bonds, in Germany saving banks sell covered bonds to their customers in the secondary market only (there are no retail investors in primary markets). However, the share of retail investors in secondary markets is quite modest, slightly higher than 1%, but in any case not exceeding 10%.[16] Based on the above, the covered bond market does not look suited to retail investors. Therefore, the possible role of covered bonds as potential retail investment products and the related possible adaptations of the disclosure requirements are not assessed in this impact assessment. Whilst retail investors play no significant direct role, they are nevertheless important players by (indirectly) providing funds to insurance / asset managers that then invest in covered bonds on their behalf.

Figure 4. Investor distribution by investor group (by year)



Source: ICF, 2017

Two factors dominate recent trends in the investor distribution of covered bonds:

- Firstly, negative or very low absolute yields have reduced the purchases of covered bonds by asset managers, pension funds and insurance companies. Their shares among investors declined from 44 per cent in 2010 to 36 per cent in 2016.

[16] No reliable figures exist on the share of retail investors in German covered bond secondary markets. Estimates reported in the text come from VDP (Association of German Pfandbrief Banks).

- Secondly, central banks have significantly increased their investments in covered bonds over the past years (12 per cent in 2010 to 31 per cent in 2016) – as a consequence of the successive Covered Bond Purchase Programmes (see next section).

ECB purchasing programme

Covered bonds are an important instrument in the conduct of monetary policy in the euro area. The Eurosystem has taken a number of extraordinary measures in support of covered bond markets during the financial crisis, becoming the larger buyer of covered bonds in the EU (nearly a third of the market).

CBPPs are successive interventions of the Eurosystem and represent key elements of the ECB's asset purchase programmes, initially aimed at restoring liquidity in the inter-banking market and facilitating the monetary policy transmission, and recently being part of the quantitative easing policy. Concretely, the Eurosystem purchases covered bonds, both in primary and secondary markets. The first two CBPPs, both one-year programmes, were implemented in 2009/10 and 2011/12 respectively. The third, CBPP3, began in October 2014 and is ongoing. By the end of 2016, CBPP3 holdings stood at €203 billion, 70 per cent of which was on secondary markets. Recent data suggest that by early 2017, the Eurosystem has already bought €210 billion of bonds under its third programme. CBPP3 substantially impacted the composition of covered bonds' investor base – with the share of central banks reaching 31 per cent in 2015/16 (up from 16 per cent in 2014 and 8 per cent in 2013). CBPP3 has also impacted supply and translated into an expansion of the covered bond issuer base.

Covered bonds and the real estate market

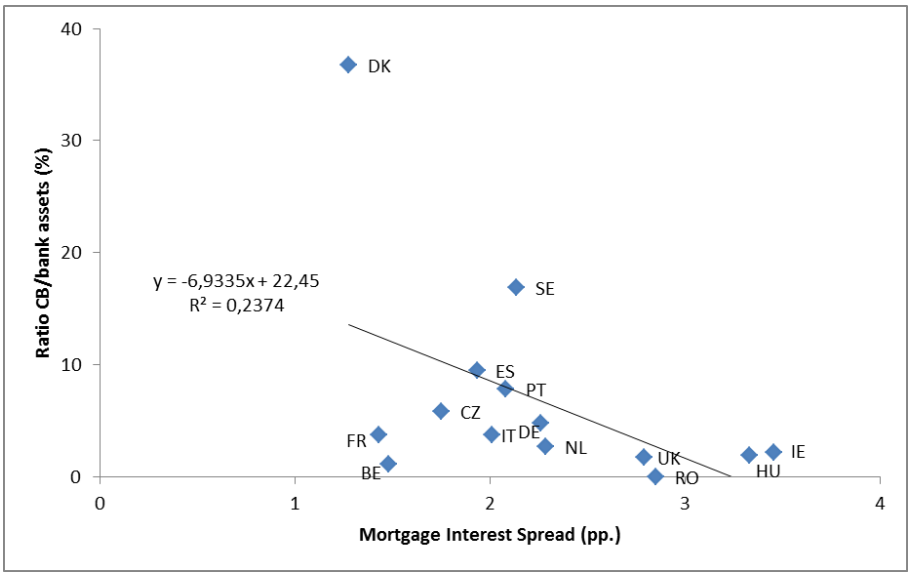
The importance of covered bonds for the real estate market is exemplified by the following numbers (ECBC data). Covered bonds cover an average of 30% of residential mortgages lending in the EU in 2015. There is a high degree of variability across countries. In Denmark all residential mortgages are financed through covered bonds. In other Northern countries (Sweden and Finland) the percentage is also quite high (between 37 and 60%). Slightly lower, but still above one third is the share in Mediterranean countries (Spain, Italy, Portugal). The percentage is 23% in France and 16% in Germany.

There is a close relationship between the level of development of covered bond markets and the interest rates on mortgages. The country with the lowest interest spreads on mortgages is Denmark with an average short-term interest rate spread of 1.28% in 2015. Denmark is also the country in the EU with one of the best developed covered bond markets and with the highest proportion of covered bonds in terms of banking assets (37.4%, see table 2).[17] Figure 5 shows that an inverse relationship between short-term interest rate spreads on mortgages and development of covered bond markets exists for all EU countries with available EMF data (a similar, slightly less negative relationship can be seen on long-term rates)[18].

[17] This is also recognized by the Commission Country Report on Denmark (2017) which explicitly states that the unique Danish mortgage system has been able to provide households with a large number of low-cost mortgage loans, resulting in one of the lowest mortgage rates in the EU (p. 17).

[18] The inverse relationship holds also eliminating outliers DK and SE. In that case, the correlation coefficient (R-squared) decreases from 0.24 to 0.18.

Figure 5. Relationship between short-term mortgage spreads and level of development of covered bond markets (outstanding covered bonds as a share of bank assets), 2016.



Sources: EMF, ECBC, ECB, Eurostat

This negative correlation between covered bond market development and mortgage spreads does of course not imply a causal relationship as there are a large range of other factors that influence spreads in different countries that cannot easily be controlled for. However, a high level of development of covered bond markets and a lower cost of funding for banks can be considered conducive to expand the availability of credit to the real economy and to lower lending rates. There is a relative consensus in the economic literature that bank's funding costs gradually pass through to lending rates. More specifically, research suggests that policy and market interest rates get to a large extent reflected in retail lending rates over a longer term horizon, while the short-term adjustment may be sluggish (see a review in De Bondt, 2002). A breakdown in the relationship between policy rates and lending rates has been observed in the aftermath of the global financial crisis in some euro area countries (Darracq-Paries et al, 2014). However, Illes et al. (2015) show that the pass-through has been comparably high in the pre- and post-crisis periods, once we account for banks' actual funding costs.

Covered bonds vs securitization

Another source of funding for banks which has similar features to covered bonds is securitization. The Commission's objective is to provide the widest possible panoply of safe and efficient funding instruments for the banking sector to support banks' lending to the real economy.

In spite of their similarities, covered bonds and securitization feature different characteristics which make them suitable for different purposes and strategies both for issuers and for investors. The main difference between the two is the dual recourse mechanism: in securitization the holder of the securitized product does not hold any claim towards the issuer. The originate-to-distribute model which mainly underpins securitization can be tempered in order to ensure the issuer keeps some "skin in the game"[19]. By contrast, by keeping a full enforcing claim towards the issuer, covered bonds ensure full "skin in the game" by design. That is one of the reasons why historically EU legislators have been ready to grant a

[19] See for example G. Chemla and C. Hennesy (2014), pp. 1597–1641.

significant preferential prudential treatment to covered bonds (see next section) which is not matched by the treatment granted to securitization. Thus the same underlying assets enjoy a better prudential treatment if they are used as collateral in the cover pool of a covered bond than if they are securitized. This means holding covered bonds is more convenient for investors in terms of capital requirements (especially for banks) than holding securitized products.

The special treatment covered bonds enjoy appears justified if one considers how differently the two products fared during the financial crisis. Whereas covered bonds proved to be a less pro-cyclical product during that period of stress, as they offered a long-term and stable funding source for banks at a moment when funding channels were drying up, securitization fared differently. Though securitization in the EU did not fare as badly as in the US, it still suffered the stigma of the crisis which led to the collapse of the market. To respond to this market failure, the Commission proposed rules for a simple and transparent securitization. This is another important difference between the two instruments: while the market for securitization was broken after the crisis and needed to be fixed, in the case of covered bonds the market continued to work well. The rationales underpinning action in these two areas are therefore of a different nature.

Overall, the two products both present advantages and disadvantages. It is up to banks and investors to assess them and choose the more appropriate funding/investing tool for them at a specific point in time based on their balance sheet and risk/liquidity requirements. The objective of the Commission is to ensure that banks have a wide range of safe and efficient funding tools at their disposal. This is why it proposed legislation on simple, transparent and standardised securitisations and is the reason why it is assessing the case for action as regards covered bonds.

2.1.2. Overview of legislative framework

Covered bonds are mainly regulated at national level. Most Member States have working covered bond markets in place.[20] Others either do not have covered bond frameworks in place, or their frameworks are outdated, the effect being that there is virtually no active covered bond market in those Member States.[21]

The national regimes in place are different, e.g. in terms of public supervision, disclosure, composition of the cover pool[22]. The different national covered bond regimes impact on the credit strength of the instrument and, therefore, on the degree to which instruments issued under different jurisdictions are eligible for EU wide preferential treatment.

There is currently no EU-wide dedicated legislative framework for covered bonds. There is, however, a body of EU law that regulates the prudential treatment for investments in covered bonds (Figure 6).

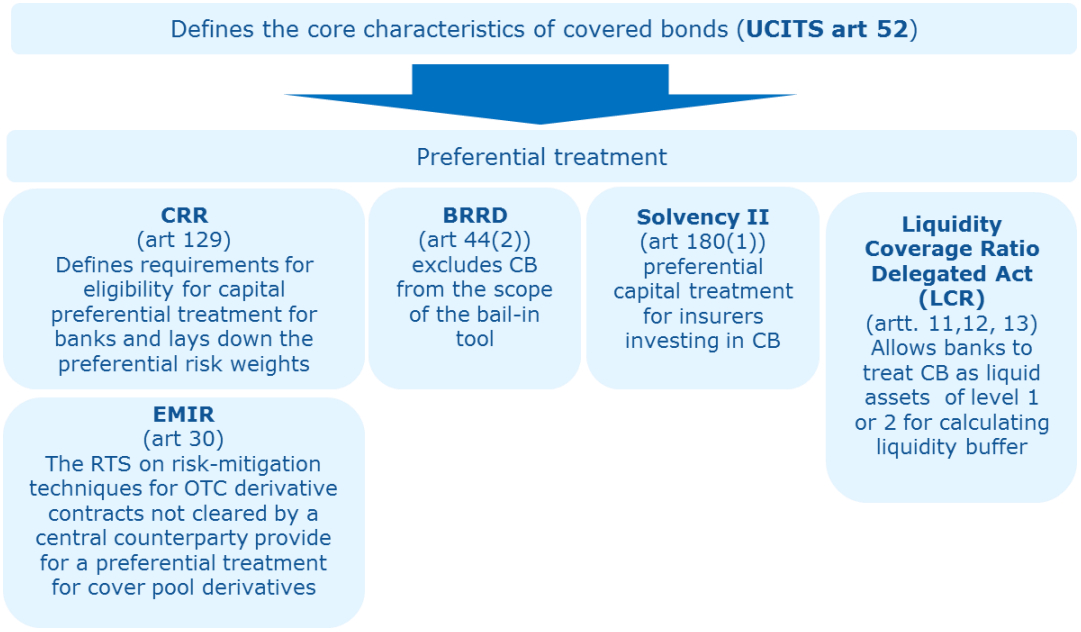
---

20 AT, BE, CZ, DK, FI, FR, DE, EL, ES, HU, IE, IT, LU, NL, PL, PT, SE and UK.

21 Examples of Member States without a framework include Croatia, Estonia and Malta. Examples of outdated frameworks include Bulgaria, Cyprus, Latvia, Lithuania, Slovenia. In Slovakia, covered bond legislation has been recently amended following the lines of the EBA best practices and is set to come into effect in January 2018. In Romania the legal framework has just been amended.

22 For an overview of the differences in national regimes see EBA (2016) and ICF (2017) p. 16

Figure 6. EU rules regulating covered bonds



Source: Commission services, 2017

The treatment of covered bonds under EU law differs from the Basel rules (or other international standards, for example IOSCO), which do not grant specific preferential treatment to covered bonds.

The remainder of this section outlines the different aspects of preferential treatment in further detail.

Higher investment limits for UCITS

Under the UCITS Directive[23], a "UCITS" (i.e. certain investment funds) cannot invest more than 5 per cent of its assets in transferable securities issued by the same entity. Article 52(4) of the UCITS Directive, however, allows Member States to raise this investment limit to 25 per cent for investments in "UCITS compliant covered bonds" issued by a single entity. Article 52(4) specifies the following minimum requirements for covered bonds as the basis for easing of prudential investment limits:

- The covered bond issuer must be a credit institution with a registered office in an EU Member State;
- The issuer should be subject, by law, to special public supervision designed to protect bond-holders;
- The cover asset pool must provide sufficient collateral to cover bondholder claims throughout the whole term of the covered bond; and
- Bondholders must have priority claim on the cover asset pool in case of default of the issuer.

Article 52(4) also obliges Member States to send the Commission a list of covered bonds that comply with the above criteria together with the categories of issuers authorised to issue such

[23] Directive 2009/65/EC on Undertakings for Collective Investment in Transferable Securities (UCITS).

bonds. Article 52(4) accordingly de facto defines a covered bond for EU regulatory purposes, serving as a reference for several other pieces of EU legislation.

Lower capital requirements for banks investing in covered bonds

According to the Capital Requirements Regulation (CRR)[24], credit institutions must hold regulatory capital in respect of debt securities held on their books, risk-weighted according to the type of issuer and obligation. However, article 129 CRR allow those investing in covered to hold lower levels of regulatory capital in relation to these instruments as compared to other debt such as senior unsecured bank debt.[25] These lower capital requirements are referred to by the CRR as "preferential risk weights". These preferential risk weights are, however, only available for "qualifying covered bonds". To qualify for preferential treatment, covered bonds must be (a) UCITS compliant [Art. 129 (1) CRR]; (b) secured by specific cover assets [Art. 129 (1) CRR]; and (c) satisfy various transparency requirements [Art. 129 (7) CRR].

Art 129 is addressed to bank investors who use the standard approach to capital risk weight allocation. While the internal ratings based approaches are substantially more complex they also allow similar levels of preferential risk weighting treatment.

Special treatment in recovery and resolution

Article 44(2) of the Bank Recovery and Resolution Directive (BRRD) [26] exempts UCITS-compliant covered bonds from the scope of the bail-in tool. It should be highlighted, however, that the BRRD limits this exemption up to the level of collateral in the cover pool.

Apart from bail-in, the application of other resolution tools might also have implications for covered bonds, particularly in the context of partial transfer of assets/liabilities to bridge institution or asset management vehicles. The BRRD also provides for safeguards to be applied in the case of partial transfers (Article 76), and Article 79 requests Members States to ensure— in the event of the partial transfers—appropriate protection of covered bonds and to prevent the assets, rights and liabilities from being separated under a partial transfer, or being terminated or modified through the use of ancillary powers.

Lower solvency capital requirements for insurance undertakings investing in covered bonds

Article 180(1) of the Solvency II Delegated Regulation lays down the capital requirements for (re)insurance undertakings investing in covered bonds.[27] The term 'covered bond' is not defined within the Solvency II Delegated Regulation itself. The definition is derived from the UCITS Directive Article 52(4). The Delegated Regulation contains certain risk calibrations in its standard formula which is used by many insurers[28] to compute their solvency capital requirement. The Delegated Regulation contains a preferential treatment for covered bonds in comparison with similar rated corporate bonds. The risk calibrations for covered bonds are in

[24] Capital Requirement Regulation (EU) No 575/2013 (CRR).

[25] E.g. 10 per cent risk weight for a "credit quality step 1" covered bond compared to 20 per cent for another type of direct exposure to a credit institution of the same step.

[26] Bank Recovery and Resolution Directive No 59/2014 (BRRD)

[27] Commission's Delegated Regulation (EU) 2015/35 (Solvency II Delegated Act)

[28] Some insurers who have received an approval to their internal models do not use the risk calibrations in the standard formula. These are typically large insurance companies.

between those applicable to corporate bonds and government bonds, provided the covered bonds are highly rated.

Favourable treatment in banks' liquidity requirements

The LCR Delegated Act requires that banks hold enough high quality liquid assets to cover the difference between the expected outflows and inflows over a 30-day stressed period.[29] It provides favourable treatment to covered bonds by allowing credit institutions to hold covered bonds as part of their liquidity requirements i.e. it allows credit institutions to treat covered bonds as liquid assets of level 1, if they qualify as "extremely high quality", or as level 2, if they are so called "high quality", for the purposes of calculating their liquidity coverage ratio (LCR). The LCR Delegated Act sets out a number of specific criteria to differentiate between covered bonds of level 1 and 2 and also incorporates by reference the well-established covered bond definition contained in Article 52(4) of the UCITS Directive.

Specific treatment of cover pool derivatives as regards clearing

Under the EMIR, derivatives should normally be cleared through a central clearing counterparty. As covered bond derivatives contain certain non-standard clauses they are typically not eligible for CCP clearing. The Regulatory and Implementing Technical Standards (RTS) under this regulation for risk mitigation for derivatives that are not cleared provide for a specific treatment of cover pool derivatives.[30] Under a specific set of conditions, covered bonds issuers or cover pools should not be required to post collateral for the derivatives held to hedge risks inherent to the cover pool. To obtain this treatment, the derivatives must meet certain conditions including compliance of the covered bonds to whose cover pool they belong to with Article 129 of the CRR and with a minimum level of overcollateralization of 2%.

2.2. Problem definition

Covered bonds are an important funding tool for banks. Their markets are well-developed in some Member States and less so in others. Given their particular risk features, they also benefit from a preferential prudential treatment in several respects. This treatment rests on a definition of covered bonds set out in UCITS, which originally was developed with a more limited purpose in mind. Taken together, this gives rise to two sets of concerns.

The first is related to the **untapped CMU potential**. Covered bond markets are currently fragmented along national borders, and national regulatory frameworks differ significantly. This creates legal uncertainty and gives rise to the following problems:

(1) covered bond markets are unevenly developed across the EU: not all banks from different countries and of different size are able to exploit the cheap and stable source of funding that covered bonds represent;
(2) the investor basis is not sufficiently diversified;
(3) there is untapped potential for cross border investments;
(4) investments from outside the EU are low.

[29] Commission's Delegated Regulation (EU) 2015/61 with regard to liquidity coverage requirement for Credit Institutions (LCR).

[30] Commission Delegated Regulation 2016/2251 supplementing European Market Infrastructure Regulation ("EMIR") No 648/2012

The second regards **prudential concerns** and related risks to e.g. investor protection. The main problems in this area are the following:

(1) misalignment between the fact that EU law does not directly lay down the structural characteristics of the product, which mostly derive from national law, and the favourable treatment granted to investments in covered bonds at EU level;
(2) inadequate current capital preferential treatment envisaged in art 129 CRR;
(3) ongoing financial innovation which could pose threats in terms of investor protection.

2.2.1. Untapped CMU potential

This section outlines how markets are unevenly developed in terms of issuance, the limited range of investors, and the limited range of cross-border investments both within the Single Market and beyond.

Unevenly developed markets

Covered bonds are unevenly developed across the EU as shown in tables 1 and 2. Covered bond issuance is dominated by a few Member States. Approximately 80% of global covered bond issuance is represented by six Member States (Denmark, France, Germany, Italy, Spain and Sweden). The four largest outstanding markets (Germany, Denmark, France, and Spain) accounted for almost two-thirds of the EU market in 2015. At the same time, nine Member States do not have any covered bond markets.

Table 1 – Uneven development of covered bond markets

Member State	Legal framework	Compliance with EBA Best Practices	Active market	Size of the market (relative to total EU market)
AT	✓	Low	✓	Medium
BE	✓	Medium	✓	Medium
BG	✓	NA	×	NA
HR	×	NA	×	NA
CY	✓	Medium	×	Small
CZ	✓	Low	✓	Medium
DE	✓	Medium	✓	Large
DK	✓	High	✓	Large
EE	×	NA	×	NA
EL	✓	High	✓	Small
ES	✓	Medium	✓	Large
FI	✓	High	✓	Medium
FR	✓	High	✓	Large
HU	✓	NA	✓	Small
IE	✓	Medium	✓	Medium
IT	✓	Medium	✓	Large
LT	✓	NA	×	NA
LV	✓	NA	×	NA
LU	✓	Low	✓	Small
MT	×	NA	×	NA
NL	✓	High	✓	Medium

PL	✓	Medium	✓	Small
PT	✓	Medium	✓	Medium
RO	✓	High*	×	NA
SK	✓	Low	✓	Small
SI	✓	Medium	×	NA
SE	✓	Medium	✓	Large
UK	✓	High	✓	Large

Source: Commission Services elaborations based on EBA (2016) and ECBC Fact Book (2016).
Legend: Small < €10 bn, Medium < €100 bn, Large > €100 bn.
**After recent amendments, Romanian framework can be considered highly compliant with EBA best practices.*

The uneven development of covered bond markets is also apparent if one compares the size of national covered bond markets with the size of national banking sectors (see table 2). In 19 out of 28 Member States this ratio is below 4.4% (the EU average), while in three the ratio is at or above 10% (Denmark, Sweden and Spain).[31]

Table 2 – Ratio of outstanding covered bonds / banking assets (2015)

EU country	Ratio CB/ bank assets	Total CB outstanding (EUR mln, 2015)	Total banking assets (EUR mln, 2015)
Denmark	37,4%	383.124	1.024.778
Sweden	17,3%	221.990	1.281.511
Spain	9,9%	280.888	2.828.440
Portugal	7,8%	34.961	450.063
Finland	6,1%	33.974	556.050
Slovakia	6,1%	4.198	69.104
Czech Republic	5,6%	11.656	206.630
Austria	5,3%	44.965	854.229
Germany	5,0%	384.414	7.665.206
France	4,0%	323.072	8.150.044
Italy	3,3%	130.535	3.919.502
Ireland	3,0%	32.305	1.086.843
Hungary	2,7%	3.022	112.408
Netherlands	2,5%	61.101	2.430.643
Belgium	1,6%	16.905	1.073.501
United Kingdom	1,3%	121.268	9.355.722
Greece	1,3%	4.961	386.025
Luxembourg	1,0%	10.166	1.002.760
Cyprus	0,7%	650	91.020
Poland	0,3%	1.266	394.333
Bulgaria	0,0%	0	48.585
Estonia	0,0%	0	23.240
Croatia	0,0%	0	57.879
Latvia	0,0%	0	31.932
Lithuania	0,0%	0	24.783

[31] Among the countries where the ratio is significantly below EU average or the market is not developed at all, there are MS with different banking structures: we find both countries where typically the banking sector is foreign-owned and countries where there is a strong domestic banking sector. This would suggest that the uneven development of covered bond markets is not related to the ownership structure of the banking sector.

Malta	0,0%	0	47.397
Romania	0,0%	0	92.288
Slovenia	0,0%	0	41.603
EU	**4,4%**	**2.105.421**	**43.306.519**

Source: Commission Services estimates.

Another way to look at the uneven development of covered bond markets in relative terms is to consider the ratio between covered bonds outstanding and residential mortgages in different countries. While the EU average is 30%, there is a lot of variability across countries with Denmark at 100% and Poland at 1.4%.

The reasons why covered bonds developed in some Member States and not in others is partly due to history. The instrument was created decades ago (in some cases even centuries ago, as in Denmark and Germany it is around 200 years old) and has grown gradually over time. There are several factors which underpin the development of covered bond markets. Some of them are of a macroeconomic[32] and structural nature[33]. There are, however, important regulatory factors that play a crucial role in the development of covered bond markets. They include:

i. the existence of an enabling regulatory framework that commands confidence among investors; and
ii. broader regulatory elements related to the insolvency framework and the enforceability of collateral, including foreclosure processes and legal aspects of asset transfer.

The lack of a legal framework in Member States characterised by underdeveloped covered bond markets in principle confirm the importance of regulatory factors. However, the cases of countries with legal frameworks in place, but no active covered bonds market (see table 1) could also suggest that other factors play a significant role. As outlined above, a legislative framework for covered bond is indeed in place in six of the nine Member States that do not have covered bond markets. As also outlined, the framework is in most instances outdated and not able to support a properly functioning market.[34] Some economic factors might help explain the lack of urgency in dealing with regulation. For example, countries with non-existent or very small covered bond markets are usually characterized by a lack of diversification in banks' funding sources. In many Central and Eastern European countries, banks mainly rely on deposits for their funding[35]. The abundance and availability of bank deposits makes the need to find alternative funding sources less compelling.

However, there are several reasons why this situation is not sustainable in the longer term. First, banks with a broad and diversified range of funding tools are more resilient, as recognised by the IMF (2013) and the BIS (2013)[36]. In times of crisis, covered bonds allow banks to continue access funding markets, as was evident during the financial crisis,

---

32 In particular, factors predicting demand for residential housing, including level of per capita GDP, unemployment, inflation and credit demand.

33 Factors related to the level of development of financial markets, in particular of bond markets, and to the level of development of the banking sector, in particular the degree to which funding is needed outside the deposit-based system and the demand of funding by end-users to purchase properties.

34 BG, CY, LT, LV, SI. Romania has just finalised a new legal framework.

35 In BU, HR, EE, LT, LV, RO, SI, mortgages are 100% financed through deposits. In HU, PL and SK, covered bonds finance only a small portion of mortgages (in PL this is less than 1%).

36 Van Rixtel and Gasperini, 2013 (BIS Working Paper 406).

especially in some peripheral European countries. For many banks most notably from Spain, Italy, Greece, Ireland and Portugal, this instrument became the main source of long-term wholesale funding, as their access to unsecured markets was partially or fully closed (Van Rixtel and Gasperini, 2013). Secondly, in normal times, in order to finance growth in banks' balance sheets, banks need other sources of funding than deposits. Deposits indeed can grow only up to a certain limit and, at the same time, they need to be financed through more capital, while covered bonds have lower capital and liquidity requirements. Finally, from the investing bank's point of view, covered bonds can be used as liquid assets to meet liquidity requirements (for example in the LCR).

Nevertheless, covered bonds also present some risks. One of the main risks resulting from a significant growth in covered bond markets is asset encumbrance i.e. assets specifically pledged to pay for certain liabilities. However, according to the EBA (2017), the level of asset encumbrance in Member States where covered bond markets do not exist or are underdeveloped is low at the moment (ranging between 0% and 10%)[37].

Undertaking a process of updating the existing legislation requires, however, specific expertise and collaboration between different institutional actors including the ministry of finance and the supervisors. This, along with the non-urgency of the bank funding diversification in some Member States, explains why some of them did not embark in the process. Other Member States are doing it with the help of the EBRD (EE, HR, LT, LV, PL, RO, SK)[38]. In Poland, for example, where the ratio of deposit to loans was 94% at the end of 2016[39], the planned total asset growth for 2017 is 15% (EBA, 2017) and the planned deposit growth 18%. However, planned deposit growth rates are not always met[40] and even a small negative deviation from the planned target could hit lending and economic growth significantly. For similar reasons, in Slovakia CB legislation has been recently amended[41]. The EBRD itself and most Member States consider having a framework at EU level in place an important blueprint on which modelling their legislation. According to the EBA, three Members States (AT, ES, IE) have informed that they intend to wait for the Commission's conclusions before taking any action. In another 9 jurisdictions no changes to national frameworks have been introduced (BE, CY, DK, FI, IT, LU, PT, SI, UK). Also in those cases, the expectation of EU action has played a role in postponing any adjustment.

There is also another dimension of the uneven development of covered bond markets which relates to economies of scale and the size of issuers. Covered bonds are mainly issued by large banks, as setting up programs entails high upfront costs. Moreover, liquidity is important in covered bond markets[42] and the latter is largely determined by a certain minimum volume of bonds outstanding. Smaller transactions are possible although they typically require a higher coupon to reflect the lack of liquidity. This explains why issuing covered bond is currently a business mainly for large banks, as illustrated by the large size of covered bond issuers across the EU (on average above EUR200 bn). As a consequence, the benefits of covered bonds are currently often beyond the reach of smaller banks.

---

37 For more details on the risks of asset encumbrance, see section 5.3.2 on Indirect Costs (p. 60)

38 A covered bond market in PL has already developed. Legislation in RO has only recently been finalized. In EE, HR, LT, LV and SK the project is on-going. In EE, LT, LV the framework will be common.

39 As a matter of comparison: in DE this ratio was 81%, in IT 86%, in Denmark 32% (IMF data).

40 In Poland the planned deposit growth rate for last year was 8% and the actual one has been 5%.

41 In Slovakia the deposit to loan ratio was 106% at the end of 2016, while the planned growth in bank assets is 18%.

42 For example, covered bond indices typically only include bonds with at least €500mn outstanding. Another example: the eligibility for ECB repo operations is frequently size dependent.

Undiversified investor base

The main investors in covered bonds are banks and central banks (see section 2.1.1). The limited uptake from other financial institutions (e.g. insurance/pension/asset managers) is problematic from a CMU perspective, as it limits these firms from channelling funds to banks and through them to the real economy. The situation was different in the recent past. As figure 4 above shows, before 2013 the combined share of investors other than banks was significantly higher. It has since declined, largely due to lower yields resulting from ECB purchasing programs. These have reduced the incentives of asset managers, pension funds and insurance companies to invest in covered bonds. This effect has been reinforced by the limited size of the market in some Member States and by fragmentation across the euro area. The lack of diversification also leads to prudential concerns, in terms of increased concentration of risks. If covered bonds end up being mostly acquired by other banks, this does not bring additional liquidity to the sector and concentrates credit risks within the sector itself, creating interconnectedness. It is therefore important to diversify the investor base in light of the temporary nature of the ECB's involvement, future financing needs of banks and to address prudential concerns.

Untapped potential for investments across the Single Market

There is an untapped potential for further development of cross-border investments across the EU single market. While cross-border investment in covered bond markets across the EU currently represents 60% of total covered bond investments, this figure needs to be better qualified[43]. Not only it overstates the cross border activity in the EU, but also the bulk of such investments come from countries with a strong covered bond tradition (e.g. Germany and Nordic countries). Germany is particularly dominant, accounting on average for 37% of all cross-border investments of which most go to Nordic countries. Finally, the most part of cross-border investments takes place across countries with similar covered bond and mortgage legislations (for example Nordic countries typically invest in other Nordic countries). All this leaves an untapped potential in terms of cross-border investments. Fulfilling this potential through a broader harmonized market would be important for issuers aiming at expanding the markets for selling their covered bonds both within and outside the Union. It would also be important for investors wanting to geographically diversify their portfolios..

In the context of the public consultation conducted by the European Commission between 2015 and 2016, many respondents confirmed that cross-border investment in covered bonds is "already taking place", but many (insurers, investors, public authorities including the ECB) underlined that it faces significant legal or practical obstacles. Among them, a commonly highlighted issue referred to differences in legal frameworks which require prospective buyers to invest more in credit analysis and legal research. This may partly explain why the investor base remains home-biased and concentrated in markets with similar regulatory frameworks.[44]

---

[43] This the average share in the EU of non-domestic investments (including extra-EU) in the primary market only in relation to covered bonds included in the IBOXX index (including the most tradable covered bonds with minimum issuance of EUR 500 million). It only considers the existing markets and in particular AT, DE, DK, FI, FR, IE, IT, NL, NO, PT, ES, SE, UK. Excluding countries where covered bond markets do not exist or are under developed, the figure overstates the cross border activity in the EU. The actual figure for the whole EU could be significantly lower and would therefore not represent a satisfying benchmark for a wholesale market.

[44] For example, an important obstacle to cross-border investments is indeed the fact that bonds issued in different EU jurisdictions do not provide the same degree of investor protection. This is reflected by ratings which differ not only for the rating of the issuer and of the country, and for the quality of the cover pool, but

Certain respondents suggested that harmonisation could encourage and facilitate additional cross-border investment. The ECB, in responding to the public consultation on the CMU MTR, manifested concern for the low comparability of covered bonds across Member States and fragmentation in the markets, showing support towards an EU covered bond harmonized framework and the EBA's recommendations to that effect.

Another aspect of the cross-border dimension is the existence of cross-border cover pools which could help lending across countries. Cross border cover pools allow lowering country risk concentration. This could help countries that do not currently have developed covered bond markets and where the small scale of mortgage operations may necessitate cross-border cover pools to achieve critical mass[45]. Nonetheless, cross-border cover pools remain very limited. Of 125 programmes rated by Fitch, only 21 included assets from jurisdictions other than the one in which the issuer was based. This minority represents EUR 70.3 billion, or 3.2 per cent of the outstanding European covered bond market. Most were concentrated in four Member States (DK, FR, DE, and LU). Many respondents to the Open Public Consultation highlighted that there are significant legal or practical barriers to cross-border cover pools. For example, only a few jurisdictions have developed rules catering for this situation, e.g. specifying valuation methodologies for loans in other countries.

Limited third-country investments

The lack of a European covered bond regulatory framework might also hamper investment from third countries, as investors from outside the bloc do not have a comprehensive basis for comparison with the covered bond framework of their home jurisdiction. Currently, investments from outside the EU represent a small share of the market as only 11% of EU issued covered bonds are held outside the EU (ICF, 2017) compared to 16.5% of total debt securities (Commission estimates). This illustrates that covered bonds are underrepresented among investments from outside the EU. This issue will become more important in the medium term when the ECB support programmes will eventually come to an end. More third-country investments would help maintain good funding conditions for European banks.[46] However, it is unlikely that those kinds of investors will invest time and resources to perform due diligence of the different characteristics of more than 25 non-harmonised national regimes.

Moreover, in absence of an EU harmonized framework it is also difficult to establish equivalence between jurisdictions and therefore allow for reciprocal recognition of preferential treatment. This could hamper foreign investors' interest in EU covered bonds and limit EU investors' range of interesting investment choices.

2.2.2. Prudential concerns

There are also prudential concerns associated with the preferred treatment enjoyed by covered bonds, given that EU law does not comprehensively define what covered bonds are and much is left to national legislation. As a result, the preferential treatment may be accorded to very different products depending on the Member State in question. Furthermore, where EU law

---

also for the different level of investor protection and the different degree of pool transparency of each jurisdiction.

45 EBRD (2017)

46 Some EU covered bonds (for example German Pfandbrief) enjoy very good reputation also outside the EU and their level of safety is deemed similar to sovereign bonds. Covered bonds of a good quality have the characteristics to be purchased by central banks and other conservative investors e.g sovereign wealth funds.

exists it may not fully address potential risks related to covered bonds (CRR) or may not have stood the test of time in terms of financial innovation or regulatory developments, e.g. as regards state aid and resolution. This section further outlines those concerns. At the same time, it is commonly recognized that covered bonds performed well during the financial crisis. This should not give ground to complacency[47], also taking into account the exceptional state support granted to the banking sector during the crisis. In forming a view on how the existing prudential rules perform, the Commission services have drawn on a variety of sources, including the two reports issued by the EBA in 2014 and 2016 as well as views expressed during the public consultation.

Diversity in national covered bond frameworks and risk of misalignment with preferential prudential treatment

As seen in section 2.1.2, the only piece of EU legislation that defines a covered bond is art. 52 UCITS. However, this provision was not conceived for this broader purpose in mind, but was rather focused on extending the limit on investment concentration in some product offerings (including those that contain covered bonds) that were considered of higher quality. The UCITS definition in Article 52(4) has therefore never been intended to serve as the general definition of covered bonds as a financial instrument, but to ensure an appropriate level of protection to investors investing in UCITS compliant funds[48]. From this perspective, the UCITS definition contains only a few provisions for a debt instrument to be considered covered bond namely: i) the nature of the issuer; ii) the dual recourse principle; and iii) the special public supervision. It does not develop detailed provisions to define other structural features of covered bonds and is therefore not suitable to be considered a proper definition for an instrument having such a significant size and importance for the EU banking sector. Over time, covered bond instruments have further developed and contain elements that go beyond the narrow definition in UCITS. For instance, some covered bonds have extendible maturity structures such as the soft-bullet and conditional pass through, while others contain specific provisions on liquidity buffers or composition of the cover pool. These aspects are not captured by the existing provisions in UCITS. Instead, the structural characteristics of covered bonds are mainly defined in national legislations. This leads to a large diversity of covered bonds instruments across the EU.

The EBA documents the current diversity in the national covered bond frameworks in legal, regulatory and supervisory terms. While there are similarities (e.g. related to dual recourse and the coverage principle), there are variations in the frameworks in the area of special public supervision as well as in relation to the disclosure of data, liquidity buffers, composition of the cover pool, and stress testing. In light of these differences, action at EU level may be necessary in order to ensure that the favourable treatment extended to covered bonds in EU legislation rests on solid ground.

For example, in relation to public supervision, the EBA finds differences across the EU in the content and level of detail regarding the rules on special public supervision, scope of duties

[47] It should also be noted that even if no covered bond defaulted during the crisis, there have been problems in the market. For example, selling the cover pool turned out to be longer and more difficult than expected in many Member States. In Spain, it took on average three years to sell assets of the cover pool. We cannot exclude, that, in the event of a future systemic crisis and absence of state bail-out funds, the length and complexity of the selling process would lead to missing payments towards bondholders and defaults.

[48] Over time, given that the covered bond definition in UCITS was the only definition available at EU level, several legislations have relied on this definition, e.g. RTS on European Market Infrastructures Regulation (EMIR), Solvency II Delegated Regulation and LCR Delegated Regulation.

and the powers of supervisory authorities regarding ongoing supervision of covered bond issuers and programmes, as well as the rules on approval and licensing of covered bond programmes. Furthermore, the EBA notes that the divergences extend beyond regulatory frameworks and are also observed in actual supervisory practices of individual competent authorities in the execution of special public supervision. The elements of the regulatory framework related to the supervisory model have indeed potential credit impact as confirmed by rating agencies.[49]

The EBA 2016 Report also shows that, since the publication of the EBA Best Practices on Covered Bonds in 2014, more than half of the responding jurisdictions (12 out of 22) have either not implemented any changes to their covered bond frameworks or action is on hold pending the results of the Commission's review of the EU covered bond framework. Convergence has therefore not taken place in the recent years during which the process has been monitored.

The diversity of national frameworks means that covered bonds with diverse characteristics benefit from the same preferential treatment. This may give rise to prudential concerns.

Preferential capital treatment not adequate (art 129 CRR)

When adopting the CRR in 2013, the legislators called on the Commission and the EBA to review whether the preferential capital treatment for covered bonds is adequate in light of the prudential risks. On the basis of a first report in 2014, the EBA concluded that art 129 CRR does not need modifications in terms of inclusion/exclusion of specific cover assets, but is less specific on equally relevant aspects of prudential treatment. In a second report in 2016, the EBA recommended that the CRR be strengthened in relation to (i) disclosure requirements for the issuer; (ii) rules on substitution assets; (iii) Loan-To-Value limits for cover assets collateralised on physical property (i.e. for mortgage cover pools); and, (iv) minimum over-collateralisation. The EBA also notes that existing provisions on the eligibility of cover assets for the capital preferential treatment should be reassessed. The Commission services share this assessment and believe that the treatment provided for in article 129 of the CRR is not adequate and that the conditions for accessing this treatment needs to be strengthened.

Not addressing new risks resulting from financial innovation

The combination of EU and national frameworks is inadequately equipped to deal with new risks presented by financial innovation. Financial innovation has, for example, prompted the increasing use of new structures, so-called Soft-bullet and Conditional Pass Through (CPT) programmes. These aim to mitigate liquidity risk through the introduction of long-term maturity extensions regarding repayments to bondholders.[50] These kinds of extendible

[49] In particular, Moody's in its evaluation methodology for covered bonds lists the following: qualifications, duties and powers of the cover pool monitor; the modalities and scope of the supervision in going concern; the modalities and scope of the supervision in the event of the issuer's insolvency/resolution; the characteristics, power and duties of the administrator of the covered bond programme post issuer's insolvency/resolution.

[50] Typically, covered bonds used to be hard bullet in the past i.e. they needed to be repaid at the scheduled maturity date. Any delay in the payments would have constituted a default event. Recently, however, more flexible maturity structures have been introduced in the market that allow for the possibility to extend maturities and repay covered bonds to bondholders later than the original scheduled maturity date. In particular, the extension of scheduled maturities might be 12 months (soft bullets), but can also be "conditional pass-through" (CPT) where the new final maturity date is set on the basis of the maximum maturity date of the cover pool assets which could translate in an extension of up to 30 years. The triggers

structures may involve a higher level of complexity, incorporate non-uniform features and introduce changes to the structural characteristics of the product, as the EBA recognizes. The new structures may pose new risks to investors in terms of liquidity. These risks may not be in line with the current preferential treatment.[51]

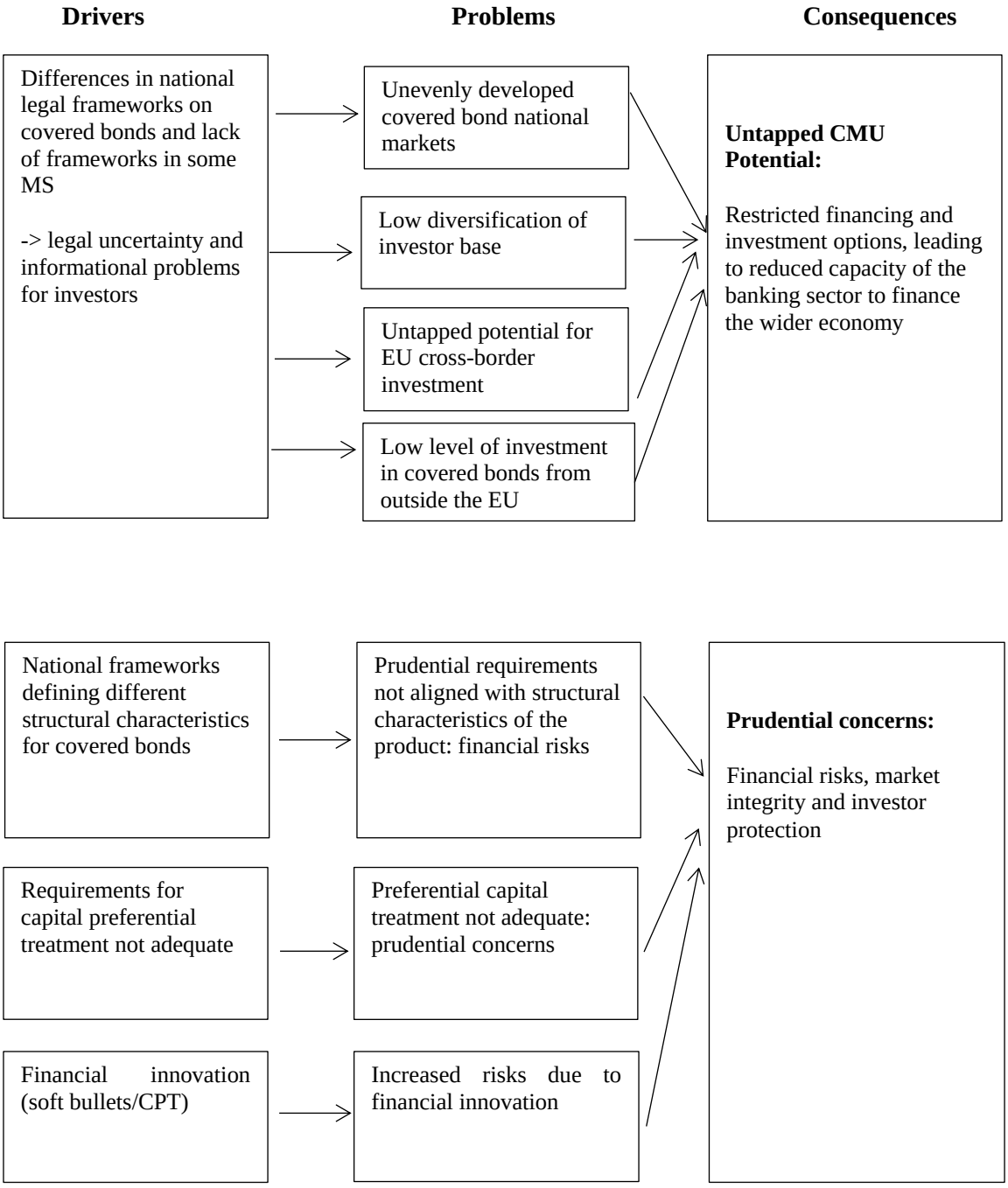
Evidence suggests that covered bonds containing these new features so far represent a relative limited share of the overall market for outstanding covered bonds. However, their market share is increasing.[52] The fact that these features have increased structural diversity in the covered bond market is also the result of how they have typically been introduced – by contractual terms – rather than by regulation. While, within any given country, soft bullet structures seem relatively homogenous, there are differences across jurisdictions.

that allow for invoking the extension may vary and can be at the discretion of the issuer or upon certain defined events, e.g. non-payment on the scheduled maturity date.

51 For example, the UCITS definition is not able to capture these aspects of maturity extension, as it contains no detailed rules on the structural features of covered bonds, including these aspects. Therefore, covered bonds featuring those extensions, despite their different liquidity risks, are considered as part of the traditional covered bond group and as such they enjoy preferential treatment.

52 There are currently €305 billion of soft bullet and €14 billion of CPT outstanding (only the benchmark bonds in the iBoxx index are included in these figures). Within this index they represent 41 per cent and 2 per cent of the total of outstanding CBs respectively. These percentages are increasing over time because more newly issued covered bonds are in these formats and the number of conversion of existing bonds from "hard bullet" to "soft bullet" structures (typically after bond-holder consent solicitations) is increasing.

Figure 7. Problem tree



2.3. The EU's right to act and justification

The Treaty on the Functioning of the European Union confers to the European institutions the competence to lay down appropriate provisions that have as their objective the establishment and functioning of the internal market (Article 114 TFEU).

The previous section demonstrated that covered bonds are unevenly developed across the Single Market and that there is an untapped CMU potential. It also highlighted that covered bonds are only partially addressed in EU law, which may give rise to prudential concerns. To address these two concerns, action at EU level is warranted.

First, concerning the CMU potential, the EU level is the most effective to address significant differences in national regulatory frameworks, diverging practices in the market and at regulatory level by Member States, fragmentation in the Single Market and lack of harmonization that hamper cross-border investments. These problems can best be tackled at EU level.

Second, as regards prudential concerns, these stem from the fact that what constitutes a covered bond is not comprehensively addressed in EU law. The only definition of covered bonds at EU level is in the UCITS directive. That definition was, however, not drafted with this broader purpose in mind but had a more limited scope and is not considered to sufficiently ensure convergence of the structural characteristics of the product across the EU with the level of risk implied by the favourable EU treatment. As a result, covered bond structural characteristics are mainly defined at national level and these regimes vary significantly. Harmonising national frameworks would ensure that the structural characteristics of the product are the same across the Single Market. EU action appears the most effective way to achieve that objective. Also in this second area, problems can therefore best be tackled at EU level.

The Public consultation, the 2016 EBA Report, the resolution of the European Parliament and subsequent discussions with Member States in e.g. the Financial Services Committee of the Council and the European Commission Expert Group on Banking, Payments and Insurance show that stakeholders in general welcome a further harmonisation in form of a directive building on well-functioning national systems. A directive represents, indeed, the best means to achieve the stated objectives while respecting the principle of subsidiarity. A number of Member States have also put on hold changes to national covered bond-legislations, which also show that they expect further harmonisation at EU level.

3. OBJECTIVES

In light of the concerns outlined in the previous chapter, two general objectives will be pursued, which in turn can be articulated into specific objectives:

- **Enhance CMU potential, leveraging banking capacity to support the wider economy***:* a harmonised EU framework for covered bonds would enhance their use as a stable and cheaper source of funding for credit institutions, especially where markets are less developed, in order to help financing the real economy in line with the objectives of the CMU. This would translate into the following specific objectives:

  – Contribute to the development of covered bonds markets in EU countries where they do not exist or are less developed. Expanding the scope of covered bond markets, is

not only to be intended from the geographical perspective, but also in terms of issuers size;
- Diversify covered bonds' investor base;
- Tap the potential for more cross border investments; and
- Attract investors from third countries.

This will be particularly important when the ECB ends its covered bond purchase programme and the monetary stance eventually becomes less accommodative. Credit institutions will then be more in need of cheap and long-term sources of funding to finance the real economy;

- **Address prudential concerns and ensure the coherence of preferential prudential treatment***:* national frameworks need to be strengthened and harmonised in order to ensure that the preferential treatment provided for under EU legislation is aligned with the level of risk implied by the structural characteristics of the instrument. This would translate into the following specific objectives:

  - Define the structural features of covered bonds in EU law in order to align the structural characteristics of covered bonds across the EU with the risk features underlying the EU preferential treatment;
  - Strengthen the requirements for benefitting from preferential capital treatment under the CRR; and
  - Define a framework for newly developed liquidity structures (Soft-bullets and Conditional Pass-Through (CPT) programmes).

Table 3 – Intervention logic diagram

Problems and consequences	Objective
Consequence 1 **Untapped CMU potential** – Restricted financing and investment options, leading to reduced capacity of banking sector to finance the wider economy.	**General Objective 1** **Enhance CMU potential** - Leveraging banking capacity to support the wider economy.
• **Problem 1**: Unevenly developed national markets	• **Specific objective 1**: contribute to develop covered bond markets in all EU countries
• **Problem 2**: undiversified investor base	• **Specific objective 2**: diversify investor base
• **Problem 3**: Obstacles to cross border investments	• **Specific objective 3**: tap the potential for more cross border investments
• **Problem 4**: Low levels of investments from outside the EU	• **Specific objective 4**: attract investors from outside the EU
Consequence 2 **Prudential concerns** – Financial risks, market integrity and investor protection	**General Objective 2** Ensure the **coherence of EU prudential regulation** with the structural characteristics of covered bonds
• **Problem 1**: diversity in national covered bond frameworks and risk of misalignment between EU preferential treatment and risk characteristics of covered bonds	• **Specific objective 1**: Define the structural features of covered bonds in EU law in order to align the structural characteristics of covered bonds across the EU with the risk features underlying the EU preferential treatment
• **Problem 2**: requirements for capital preferential treatment not adequate	• **Specific objective 2**: strengthen the requirements for benefitting from preferential capital treatment in CRR (art 129)
• **Problem 4**: increased risks due to financial	• **Specific objective 4**: define a framework for

innovation (soft bullets and CPTs)	new liquidity structures

4. OPTIONS

This section will examine the policy options available to achieve the above objectives. The baseline scenario consists of the current status quo (i.e. no action). There will then be a range of options that differ in terms of intensity of harmonisation, spanning from a non-regulatory option to options involving full harmonisation. More specifically:

- Baseline: do nothing;
- Option 1: Non-regulatory option;
- Option 2: Minimum harmonisation based on national regimes;
- Option 3: Full harmonisation replacing national regimes; or
- Option 4: 29th regime operating in parallel to national regimes.

The four options listed above will all be assessed in the following. In addition, the final part of this section outlines an option (adjusting the preferential prudential treatment) that has been discarded as it would significantly disrupt existing markets and lacks any stakeholders' support.

This section explores the main advantages and disadvantages of the options listed above. For ease of reference, the following policy-option matrix (table 4) summarises each of the available options (rows) along with the related policy areas to be addressed (columns). Each cell specifies the level at which each area will be settled. The first column is about the structural characteristics that a covered bond must have (for example dual recourse, segregation of cover assets and bankruptcy remoteness of the cover pool). The second column is about what assets should be allowed in the cover pool (especially in terms of traditional vs non-traditional assets). The third column is about how covered bonds should be supervised. Such "special public supervision" is another fundamental characteristic of covered bonds. The fourth column is about whether or not EU covered bonds should be granted a label. The fifth column is related to the preferential treatment that covered bond investors enjoy under EU law (cfr section 2.1.2). The sixth column is related to transparency requirements. Finally, the last column concerns all the other technical aspects spanning from overcollateralization levels to cover pool derivatives and liquidity risk mitigation tools. Each of the four options considered will cover all the policy areas in the columns with a different degree of harmonisation.

Table 4 – Policy-option matrix

	Structural features a)	**Cover pool b)**	**Supervision c)**	**Label d)**	**Preferential treatment e)**	**Transparency f)**	**Technical aspects g)**
Baseline	Mainly national	National	National	Market	EU	Market	National
Option 1	Mainly national	National	National	Market	EU	Market	National
Option 2	EU	National and EU	National + basic EU rules	EU	EU revised/ strengthened	EU	Principles at EU level + details at national level
Option 3	EU only	EU	National/SSM + detailed EU	EU	EU revised/ strengthened	EU	Principles + details at EU

			rules				level
Option 4	EU (national for parallel regimes)	EU (national for parallel regimes)	National/SSM + detailed EU rules	EU	EU revised/ strengthened	EU	Principles + details at EU level (national for parallel regimes)

In designing these options, the Commission services have taken due account of the views expressed by various stakeholders and in particular the 2016 advice of the EBA and the 2017 report of the European Parliament.

The EBA advice

In their 2016 Report, the EBA suggests a 'three-step approach' to the harmonisation of covered bond frameworks in the EU:

(1) **Step I**: develop a principle-based covered bond framework, which would aim to provide a definition of the covered bond product as an instrument recognised by the EU financial regulation (implementation via directive is recommended). This would be the central point of reference for prudential regulation purposes;

(2) **Step II**: targeted amendments to the CRR provisions on covered bonds, which would aim to enhance conditions for the access to preferential risk weight treatment of covered bonds;

(3) **Step III**: use of non-binding instruments with a view of stimulating voluntary convergence between national frameworks in specific areas considered less critical in terms of alignment with preferential prudential treatment, and, at the same time, also the most controversial among Member States.

Overall, the EBA approach is advocating for minimum harmonisation. The EBA approach intends to be principle based and to build on the strengths of the existing national frameworks, while, at the same time, ensuring more consistency in terms of definition and regulatory treatment of covered bonds in the EU. It should however be noted that some stakeholders, including Member States, have expressed the view that the 2016 EBA report, in some instances, goes beyond the advocated principle-based approach and gets into a high level of details on some issues (e.g. liquidity requirements).

The EP Report

Overall, the EP Report shares the EBA approach to covered bond harmonization, except for some elements. For example, the EP report proposes a common definition of covered bonds based on two labels: some covered bonds would become Premium Covered Bonds (PCBs) and others would remain Ordinary Covered Bonds (OCBs). In addition, the Parliament also proposes to create a new category of covered bonds to be named European Secured Notes (ESNs) based on SMEs loans or non-government-backed infrastructure loans.

4.1. Baseline: do nothing

The baseline scenario implies no action at EU level. The structural features of covered bonds would therefore continue to be regulated mainly at national level with the exception of the few elements imposed by the UCITS Directive (Art. 52). The current preferential treatment would remain in place. The Best Practices published in 2014 by the EBA would continue to serve as a reference point for the coordination of Member States regulations, but they would remain voluntary. The industry could continue or intensify its ongoing initiatives of voluntary

standardization. While the definition of an industry-led EU covered bond label is already in place in relation to transparency requirements (see work of European Covered Bond Council[53]), in the future the industry could provide standardisation also in the field of defining market standards for new maturity structures. Another market push in the direction of harmonisation could come from credit rating agencies' requirements as issuers tend to comply with them to get better ratings.

Under this scenario:

a) **Structural features**: The structural features of covered bonds would remain regulated at national level;
b) **Cover pool**: The cover pool would remain regulated at national level. However, for covered bonds eligible for capital preferential treatment, assets are explicitly listed in art 129 CRR;
c) **Supervision**: The characteristics of the supervision model would remain regulated at national level;
d) **Label**: The labelling process would be market-driven;
e) **Preferential treatment***:* Preferential treatment would remain regulated at EU level in different pieces of EU law (see section 2.1.2);
f) **Transparency***:* Transparency requirements would remain mainly market driven. However, for covered bonds eligible for capital preferential treatment under article 129 CRR, transparency requirements would remain explicitly listed in the same article; and
g) **Technical aspects**: Other technical aspects would remain regulated at national level.

Under the baseline scenario, covered bonds issuance is expected to increase in the short term. According to a survey by the EBA, EU banks indeed plan to increase covered bond issuance in 2018 and 2019 after below average supply in 2017.[54] However, this only affects the largest and established EU covered bond markets. Substantial increases compared to 2017 of the order of 50% are expected in Sweden, Germany, Denmark, France, Italy and Spain. The main driver is the expectation of increase in overall debt issuance in the banking sector for the next couple of years. The latter is due to the winding down of central bank funding and to improved economic conditions. According to Credit Agricole analysis, spreads are expected to widen by around 20-30bp on the back of tapering.

In relation to the main problems identified in section 2.2, under the baseline we would expect:

- **CMU potential – Problem 1**: a few countries with no legislation in place would undertake legislation in line with EBA best practices. It is unlikely that all countries would comply with EBA best practices, as empirical evidence has already shown. Even if issuance in the largest and well-established market is expected to increase compared to 2017 (see above), no uptick in issuance is expected in less developed markets.
- **CMU potential – Problem 2**: the increase in yields of around 20-30bp on the back of tapering (see above) would likely have the effect of attracting investors other than banks

[53] The European Covered Bond Council (ECBC) is the platform that brings together covered bond market participants including covered bond issuers, analysts, investment bankers, rating agencies and a wide range of other interested stakeholders. The ECBC currently has over 100 members across more than 30 active covered bond jurisdictions globally. The ECBC represents over 95% of covered bond issuers in the EU.

[54] EBA (2017). The EBA survey is based on a sample of 155 banks from all EU countries asking about their funding plans for 2017-2019.

such as insurers and asset managers. The latter have partly retreated because of the ECB purchasing programmes and should find it easier to recover their demand should the CBPP3 step back and the yields widen thus proving more attractive for them.

- **CMU potential – Problem 3**: no significant changes are expected in this respect and the cross-border activity is expected to remain the same and taking place mainly between countries with similar jurisdictions (see section 2.2).
- **CMU potential – Problem 4**: no significant changes are expected in this respect. In the absence of any EU regulatory framework for covered bonds, it would be difficult to assess equivalence with third country regimes. This would hamper investments by third countries. It would also restrict the choice for investors based in the EU. Moreover, the increased issuance coupled with the likely reduction or ending of the ECB CBPP3 could cause difficulties for issuers in placing their issuance on the market.
- **Prudential concerns – Problem 1**: the process of harmonisation would not necessarily take place or would take place only slowly, mainly driven by market forces. In some areas, a process of divergence could be envisaged for example in relation to market innovations. This could increase prudential concerns associated with the preferential treatment, the conditions of which would remain unchanged. This could undermine the international credibility of EU covered bonds. An eventual reduction of preferential treatment would imply costs to the market (see section 4.6).
- **Prudential concerns – Problem 2**: the inadequacy of requirements for capital preferential treatment under art 129 CRR could undermine the international credibility of EU covered bonds. An eventual reduction of preferential treatment would imply costs to the market (see section 4.6).
- **Prudential concerns – Problem 3**: the proliferation of market innovations might lead to increased divergence across Member States. For example, the increase in the issuance of soft bullet and CPT could replace the whole market in some countries and not in others (in Germany all issuance is hard bullet whereas other jurisdictions such as Italy currently only issue soft bullets). This would widen differences across Member States in terms of the structural characteristics of the product and make the rationale for preferential treatment still more difficult to defend.

4.1.1. Advantages

The baseline would imply no disruption of the status quo and no costs of adaptation and transition. Member States would retain their own models and related specificities. This would help preserving the functioning of at least those markets already working well. In the absence of EU action, market bodies might try to regulate the market themselves (e.g. by developing further standardisation practices). In addition, in the absence of EU action, Member States might also change their laws to conform to EBA best practices. At the same time, credit rating agencies could induce issuers to comply with international standards (e.g. EBA best practices) independently of national rules.

4.1.2. Disadvantages

Voluntary convergence is no guarantee of effective and coherent harmonization. Moreover, market-based voluntary arrangements aimed at harmonising certain market practices in the form of self-regulation are unlikely to constitute a sufficiently robust basis for maintaining over time the preferential prudential treatment currently conferred on covered bonds. Moreover, as any convergence would be voluntary, there is no certainty that actors in the market would comply. In addition, there is no guarantee that market standardisation goes in a

prudentially sound direction: the content of market standards would indeed be beyond the control of regulators and could deviate from EBA best practices. Finally, there would be no covered bond label at EU level in regulatory terms, but only national labels. All the above elements hamper both the achievement of further stimulating market development (objective 1) and addressing prudential concerns (objective 2).

4.2. Option 1: Non-regulatory action

Under this option, harmonisation would be encouraged on a voluntary basis through the use of soft tools such as the issuance of recommendations by the Commission. This would accompany and support what has already been done by the EBA and the ECBC (see baseline scenario). The backing by the Commission would provide further encouragement for Member States and issuers to align with the recommended best practices. No legislative initiative would be undertaken under this scenario.

This option is not in line with the EBA advice and with the EP Report as both ask the Commission to legislate. This option only partly overlaps with the third step of the EBA approach where compliance is left to voluntary convergence. However, for the EBA, this step should only concern minor areas considered less critical in terms of alignment with preferential prudential treatment.

Under this option:

a) **Structural features**: The structural features of covered bonds would continue to be regulated mainly at national level;
b) **Cover pool**: The cover pool would continue to be regulated at national level. For covered bonds eligible for capital preferential treatment, assets would remain explicitly listed in article 129 CRR;
c) **Supervision**: The characteristics of the supervision model would continue to be regulated at national level;
d) **Label**: The labelling process would be market-driven;
e) **Preferential treatment**: The preferential treatment would continue to be regulated at EU level;
f) **Transparency**: The transparency requirements would continue to be market driven. For covered bonds eligible for capital preferential treatment under article 129 CRR, transparency requirements would continue to be explicitly listed in the same article;
g) **Technical aspects**: Other technical aspects would continue to be regulated at national level.

The main difference with the baseline would be the active role the Commission would take alongside the EBA in issuing recommendations and best practices. In addition, market standards would continue to play an important role and could be further strengthened by the Commission backing.

4.2.1. Advantages

The main advantage of this approach is that it would minimise any potential disruption on the functioning of the current regimes and the related costs compared to all other options. From the regulatory side, Member States would have more scope to retain their own models compared to other options. This would help preserve the functioning of at least those markets already working well. EU recommendations could provide backing both to the EBA Best

Practices and to market-led self-regulation initiatives. This could encourage Member States drafting sensible covered bond frameworks and align them with EU recommended best practices. This in turn would help achieving objectives 1 and 2.

4.2.2. Disadvantages

The disadvantages of this option are very similar to those of the baseline. As illustrated above, the use of non-binding tools and self-regulation has limits. That undermines the willingness and ability of operators in less developed covered bond markets to conform to an EU recommended framework. This, along with the lack of an EU label, would in turn hamper further market development (objective 1) and in particular the potential to develop not existent or very small markets. It would also not help enhance cross-border investments and attract more investments from third countries. At the same time, those jurisdictions where covered bond features are not coherent with the risk level implied by the EU-wide preferential treatment would be allowed to leave their frameworks as they are. The prudential concerns would therefore not be addressed (objective 2).

Moreover, this option has been discarded by a large majority of institutional stakeholders, among them notably the EBA, the European Parliament and the ECB as an ineffective way of achieving harmonisation. The majority of other stakeholders have underlined that market-led initiatives are valuable but insufficient. At the beginning of the consultation process, a majority of market stakeholders (in particular issuers) was in favour of this option. However, after the EBA published its advice, clarifying the contours of a possible EU legislative initiative, industry views have evolved, as testified by the ECBC position. Accordingly, only a minority of market stakeholders remain in favour of non-legislative action.

4.3. Option 2: Minimum harmonization based on national regimes

Under this option, a harmonised legal framework for covered bonds would be established at EU level. This EU framework would aim at a minimum level of legislative harmonization across the EU, building on the characteristics of existing national jurisdictions and seeking to avoid disrupting well-functioning markets. Under this option, the structural features that covered bonds must respect in order to be labelled as such would be harmonised to ensure that a minimum set of common basic structural rules become applicable across the Single Market. The specificities of well-functioning national markets would be taken into account and accommodated as far as possible. Where possible, harmonisation would remain principle-based, minimising detailed provisions to the strict minimum. Member States would therefore retain some room of manoeuvre to devise their own laws on how to reach the goals set out in the directive. This would allow national specificities to remain in place, provided they are compatible with the principles defined in the EU framework. Under this option, Article 52 of UCITS would be replaced by a new Directive defining the structural elements of covered bonds. This would become the new point of reference for other pieces of EU legislation and would be the only EU definition of what is a covered bond. Among those pieces of law, Article 129 CRR would also be adjusted in order to strengthen the conditions for accessing the preferential capital treatment.

This option is in line with the EBA advice and with the EP Report as both ask the Commission to legislate and to define (through a directive) the structural features of covered bonds at EU level, remaining principle based and respecting the characteristics of national markets. Concerning the overall approach and most of the specific recommendations for each policy area, option 2 comes close to the EBA advice. In particular, this option follows the

three-step approach defined by the EBA. However, there are differences between option 2 and the EBA Report, notably as regards the level of detail and prescription as option 2 would not go as far as sometimes suggested by the EBA.[55]

Regarding the EP Report, option 2 is in line with the EP position concerning the approach (principle based) and the legislative means (directive). However, also in this case, in some areas the level of details of the proposal by the EP is too high for a principle-based approach. Moreover, the EP Report defines three labels: PCBs, OCBs and ESNs sharing common basic features and being part of the same legislative initiative. This is not endorsed by the Commission that has already decided that while the ESN is promising, given the particular risk characteristics of SME loans, it requires a dedicated impact assessment separate from that of covered bonds.

Under this option,

a) **Structural features**: The structural features of covered bonds would be regulated at EU level through a dedicated directive. The very high level principles contained in art 52 UCITS would be replaced by a new self-standing directive that would define the structural elements a covered bond must comply with. This directive would also serve as a point of reference for the several pieces of EU law that grant preferential treatment to investments in covered bonds. It would regulate key elements like for example the dual recourse mechanism, the need to segregate cover assets and ensure the bankruptcy remoteness of the cover pool.
b) **Cover pool**: The cover pool would be regulated both at EU and national level, with principles set at EU level and implementing measures at national level. As is the case today, the new instrument would not list what types of assets can be used in the cover pool in the context of the directive, nor explicitly exclude any of them (status quo compared to Art. 52 UCITS). It would nevertheless define principles[56] that guarantee the high quality level of the assets in the cover pool, allowing for some flexibility for the Member States to decide on their preferred assets. At the same time, as it happens today, assets are strictly listed in art 129 CRR in order to identify the subgroup of covered bonds which are granted preferential capital treatment. Under option 2, the situation concerning article 129 CRR would stay the same as in the baseline with the possibility to reassess some kinds of assets currently listed in art 129 such as ships. Assets, such as SMEs and infrastructure loans, which most likely would not fit the principle of asset eligibility set out in the defining directive, could be considered part of the ESN initiative targeted at creating a new instrument (see section 1). In terms of cover assets, the new directive would also extend the possibility to use pooled covered bond structures i.e. covered bonds using as cover assets other covered bonds or pooled assets in order to let small issuers enjoy economies of scale. Finally, under this option, the new directive would envisage the removal of all legal obstacles to cross-border cover pools;
c) **Supervision**: General principles of special public supervision would be defined at EU level specifying the areas that the special public supervision should cover while

[55] While the EBA declares to be principle-based, in certain areas (e.g. liquidity requirements) it effectively suggests very detailed provisions which would better suit a full harmonization regime (option 3). Therefore, while the EBA advice broadly corresponds to option 2, there are some elements in it that would better fit with option 3.

[56] Such assets would need to be of high quality and it should be possible to determine either their market or mortgage lending value. In addition, requirements on the legal enforceability would need to be met in order to ensure that the cover assets can be repossessed.

leaving the choice to the Member States to decide on how such supervision should actually take place. Supervision principles also imply the definition of eligibility criteria for issuers. Supervisors will have to apply those principles when authorizing covered bond programs. Under this option, supervision would stay with national competent authorities.

d) **Label**: Under this option, "European covered bonds" (EU CB) would become an EU label. Issuers would be able to (voluntarily) use this label when marketing their bonds, provided that the product complies with the requirements set out in the directive. Monitoring of compliance with the conditions under which such label could be legally used would form part of the special public supervision of the covered bond framework. An ex-ante control of the use of the label would not be necessary, but supervisors should be able to withdraw its use when the conditions are not/or longer met (with possible sanctions). National denominations and labels would be able to stay in place and could be used simultaneously or alternatively, at the discretion of the issuer. Supervisors should periodically compile a list of EU CBs. This approach would differ from the one recommended by the EP report where two different labels would be granted to covered bonds: Ordinary CBs (OCBs) when compliant with the directive and Premium CBs (PCBs) when compliant with both the directive and article 129 CRR. Such double label does not appear necessary to promote the EU legislation among investors and would risk creating confusion as to the actual nature and quality of the different instruments.

e) **Preferential treatment**: Preferential treatment would only be granted to covered bonds compliant with the requirements set out in the directive. In some cases (for example for the CRR art 129 capital preferential treatment) additional conditions would need to be met to become eligible for preferential treatment. In particular, the conditions of eligibility for preferential treatment in the CRR for investors in the banking sector would be strengthened, following advice by the EBA[57], by introducing additional rules on substitution assets, minimum overcollateralization and by revising rules concerning eligible cover assets and LTV limits.[58]

f) **Transparency***:* transparency requirements in the form of increased disclosure, frequency and granularity would be set in the directive;

g) **Technical aspects**: other technical aspects would be considered mostly in the form of principle based provisions leaving leeway to Member States to translate those principles into more detailed requirements. For example, principles would be defined in the directive to establish liquidity requirements or specific conditions for maturity extensions.

---

57 In their 2016 Report and in previous Opinions, the EBA assessed that, from the prudential point of view, the requirements set out in art 129 CRR need to be strengthened. See section 2.2.2

58 Concerning preferential treatment for investors in the insurance sector envisaged in Solvency II, Commission services do not have any new data or evidence sufficient to justify a change from a prudential perspective. Moreover, the existing risk calibrations for covered bonds are already favourable compared to corporate bonds. One can argue that flexible maturity features increase the risk of cash flow uncertainty to insurers as investors. While, at this stage, there is no evidence that the calibration needs to be changed, it is possible that a new asset category will need to be created and the relevant ESA (EIOPA) will be asked for advice on the calibrations. Concerning the preferential treatment for UCITS investors, which is a waiver on a concentration limit, there is no evidence suggesting this must be changed and no technical advice by ESAs has been produced in this respect. While no change would be directly introduced to the prudential regime applicable to UCITS and insurance companies investing in covered bonds, those would nevertheless benefit from the additional level of harmonisation and strengthening of investor protection envisaged in the new directive. Finally, concerning pension funds, there is not currently an EU framework on quantitative capital requirements for occupational pension funds, so it is impossible to envisage a preferential treatment at EU level for pension funds investing in covered bonds.

4.3.1. Advantages

This approach would respect the national characteristics of those markets already working well as advocated by all stakeholders (especially Member States). This option would be in line with what is envisaged by the EBA and the European Parliament. In general, all stakeholders in the public consultation advocated a principle-based approach building on the characteristics of existing national frameworks already working well. A minimum level of harmonization would help developing markets and stimulate cross-border investments, in line with objective 1. At the same time, it would make the framework more robust from the credit point of view and this would better underpin the preferential treatment envisaged in EU legislation, so meeting objective 2. This option carries a lower disruption potential compared to options 3 and 4, as recognized by Member States and stakeholders and would lower transition costs as compared with options 3 and 4. Overall it is more in line with subsidiarity. Finally, the strengthening of the eligibility conditions for the preferential prudential framework for banks investing in covered bonds would also strengthen the international credibility of the preferential treatment accorded to covered bonds.

4.3.2. Disadvantages

Being too principle-based could imply the risk of not providing an effective harmonisation, if national rules do not properly reflect the principles. This would not help develop markets and cross-border investments as per objective 1. At the same time, leaving Member States too much flexibility might present the risk of them making more hazardous choices, for example in terms of assets to be allowed in the cover pool. This would hamper achieving the objective of addressing prudential concerns (objective 2). The main challenge with this option would therefore lie in how to achieve a proper balance between a principles-based approach and more detail where necessary. In addition, this option also entails adaptation costs compared with the baseline and with option1 (see section 5).

4.4. Option 3: Full harmonisation

This option would involve the design of a new fully harmonised regime for covered bonds at EU level. In contrast to option 2 (minimum harmonisation), this option would establish a fully harmonised EU framework for covered bonds that would replace existing national regimes. It would define every detail of a sound covered bonds regulatory framework. It would also be different from option 4 to the extent that it would replace national regimes instead of flanking them. The legislative instrument envisaged to implement this option would be a regulation.

This option differs both from the EBA advice and from the Parliament Report as both ask the Commission to define (through a directive) the structural features of covered bonds at EU level, remaining principle based and respecting the characteristics of national markets. A full harmonization instead would be very detailed, leaving no space to Member States for adaptation and would risk disrupting markets that are currently working well. Option 3 also departs from the EBA three steps approach. In spite of all the differences, there are, however, some similarities between option 3 and the EBA Report. The very detailed provisions envisaged in certain areas would fit with this option better than with option 2. Overall, however, option 3 foresees a much more detailed harmonisation of rules compared to the ones advised by the EBA and proposed by the Parliament.

Under this option,

a) **Structural features**: the structural features of covered bonds would be defined at EU level. A comprehensive definition would focus on the structural features a covered bond must have in order to seek regulatory recognition (for example in terms of dual recourse mechanism, segregation of cover assets and bankruptcy remoteness of the cover pool) and would replace the covered bond-related provisions in UCITS Directive. This would be similar to option 2, except for the fact that all rules would need to be very detailed, not just enouncing principles, but also accompanying them with operational details as this framework would replace all the existing national ones.
b) **Cover pool**: in terms of cover assets allowed in the cover pool, they would need to be explicitly listed, thus significantly limiting Member States leeway in this area. It would be necessary to make specific choices on the kind of traditional or not traditional assets allowed in the cover pool. In case only traditional assets are allowed, the need to launch a parallel and separate instrument based on SMEs and infrastructure loans (ESN, see section 2.1) would become urgent. Coverage requirements would need to be defined in details. A similar provision allowing pooling structures for cover pools (as in option 2), would be introduced in order to let small issuers enjoy economies of scale. Finally, similarly to option 2, also under this option the regulation would envisage the removal of all legal obstacles to cross-border cover pools.
c) **Supervision***:* supervision would remain with national competent authorities for the less significant institutions and for banks outside the euro area, while it would go to the SSM/ECB for the largest banks in the euro area. This would be the consequence of pursuing full harmonization. Related level 2 legislation would be required to ensure consistent application of the legal framework. In that respect, the duties of the supervisors would need to be spelled-out in detail for instance in terms of the way covered bonds programmes would need to be authorised.
d) **Label**: a labelling process would be put in place similarly to option 2. In this case, however, the EU label would replace all the existing national labels.
e) **Preferential treatment**: same changes of the provisions governing the preferential treatment as in option 2.
f) **Transparency***:* transparency requirements would change as in option 2.
g) **Technical aspects**: other technical aspects would have to be included in the EU framework with a sufficient degree of detail to make them operational. Differently from option 2, there would be no leeway in how Member States implement those detailed requirements, as the regulation would be directly applicable. A significant amount of level 2 legislation would likely be required.

4.4.1. Advantages

As this framework would include detailed proposals for every aspect of covered bond operations, there is less risk that Member States might not implement uniformly the rules defined in EU law. This uniformity would help develop markets, as it would provide to every jurisdiction in the EU an immediate tool to be used to develop their markets. It would also enhance cross-border investments and international attractiveness of covered bonds. Overall it would strengthen the CMU related dimension as per objective 1. At the same time, as Member States would not be allowed the flexibility to make more risky choices, for example in terms of assets to be allowed in the cover pool, the risk characteristics of the instrument set at EU level would be perfectly aligned with the preferential treatment set at the same level and this coherence will help achieving objective 2.

4.4.2. Disadvantages

Both institutional and market stakeholders responding to the public consultation have warned that detailed harmonisation along the lines of this option could have unintended negative consequences, especially for well-functioning markets, neutralising possible benefits. Designing a new framework for covered bonds would imply a more significant disruption of the status quo with the risk of damaging those markets already working well, even if a transitional period may partly mitigate these concerns. Under this option transition costs would be the highest compared to all other options, especially for those jurisdictions not aligned with the characteristics of the instrument at EU level. Designing a proper transitional phase would be more challenging than for options 2 and 4.

A large majority of respondents to the public consultation as well as public stakeholders involved in the process, from the EBA to the Parliament, have suggested this option would be too disruptive to well-functioning markets entailing too high costs for credit institutions and for the overall functioning of financial markets.

4.5. Option 4: 29th parallel regime

This option would be very similar to option 3 with the difference that instead of substituting the current 28 regimes with a new one as envisaged in option 3, the newly created regime would co-exist and operate in parallel and compete with the existing 28 ones, becoming the 29th regime. Differently from option 3, the new regime, if successful, could be expected to gradually replace the existing ones instead of directly superseding them from the outset. This replacement would happen on the basis of voluntary adoption by actors in the market.

This option is not in line with the EBA advice and with the EP Report. Neither of the two suggested implementing a 29th regime.

Under this option, the content of the new regulatory framework would largely resemble the one under option 3:

a) **Structural features**: the structural features of covered bonds would be defined at EU level through a regulation. This would be similar to option 3, except for the fact that this regulation would not supersede the existing national legislations, but would flank them.
b) **Cover pool**: in terms of cover assets allowed in the cover pool, they would need to be explicitly listed, thus significantly limiting Member States leeway in this area. This would be similar to option 3.
c) **Supervision***:* supervision would remain with national competent authorities for the less significant institutions ad for the banks outside the euro area, while it would go to the SSM/ECB for the largest banks in the euro area similarly to option 3. Related level 2 legislation would be required to ensure consistent application of the legal framework. It would be similar to option 3 except for the fact that competent authorities would have to supervise two separate regimes: the national one and the European one.
d) **Label**: a labelling process would be put in place similarly to option 3. In this case, however, the EU label would flank the existing national labels instead of substituting them.
e) **Preferential treatment**: concerning the preferential treatment two sub-options would be available. 4.1) Neutral approach meaning existing EU rules granting preferential

treatment (UCITS, CRR, Solvency, LCR, EMIR) would stay in place and continue to grant preferential treatment not only to EU covered bonds issued under the 29th regime, but also to covered bonds issued under national frameworks, as is the case now. However, this may not provide sufficient incentives for market participants to use the new 29th regime. 4.2) Providing incentives to pursue the maximum take up of the 29th regime meaning the current preferential treatment at EU level would need to be reserved exclusively to the 29th regime with high costs of disruption of existing markets.

f) **Transparency***:* transparency requirements would change as in option 3.

g) **Technical aspects**: other technical aspects would have to be included in the EU framework with a sufficient degree of detail to make them operational as in option 3. A significant amount of level 2 legislation would likely be required.

4.5.1. Advantages

A 29th regime would offer an off-the-shelf comprehensive regulatory framework to issuers wanting to use an EU label for attracting investors. Member States with no or with underdeveloped covered bond markets could be expected to use the new regime. This option would offer flexibility to issuers who would be able to choose between issuing under their existing national regimes or the 29th regime. Finally this option should offer the benefit of providing a fully integrated regime for issuers on a voluntary basis and would not require any amendments to existing national covered bond laws.

4.5.2. Disadvantages

The main risk of this option would be that the market development and prudential objectives set out above would not be achieved due to a limited market take-up, especially under sub-option 4.1. Its adoption by market participants is indeed based on a voluntary choice and there is no guarantee this regime will become the standard at EU level, especially in well stablished markets where issuers and investors alike highly value their systems. However, as outlined above, the 29th regime could take off in less developed covered bond markets. This could cause fragmentation in the EU internal market and would also increase costs as different regimes would run in parallel. In addition, the survival of several well-established regimes plus the 29th would confuse investors and increase complexity.

To overcome the issue of a limited take up and related fragmentation, incentives would need to be provided as for sub-option 4.2. However, this would be politically contested. Both sub-options present high costs, with no obvious compensating benefits. All the above has been recognized by stakeholders by all sides both from institutions and the market. A large majority of respondents to the open public consultation have rejected this option. This option builds on market participants adopting the new market practice to be successful. Given the scepticism expressed by all stakeholders, this is unlikely to be the case. This option is therefore unlikely to meet the objectives set out above.

4.6. Discarded option: adjusting the prudential treatment

A logical alternative that can be considered, at least to address prudential concerns, would be to adjust the preferential prudential treatment, instead of harmonising the structural requirements of the instrument.

However, adjusting preferential prudential treatment could only mean downsizing it, if one wants to address the prudential concerns highlighted above. The preferential treatment currently granted can be considered the maximum acceptable deviation from international standards (for example Basel). Repealing or limiting the prudential treatment would have disruptive effects on existing markets. According to ICF[59], the effect of the loss of preferential capital treatment for covered bonds can be estimated by observing the differential in yields between CRR compliant and non-CRR compliant covered bonds by the same issuer. A reliable example of this is provided by two series of bonds issued by the same Danish issuer. The spread in the yields between a CRR compliant and a non-CRR compliant covered bond both issued by the same issuer with the same maturities range between 4.8 and 21.1 basis points (average 12.0, timeframe considered November 2014-July 2015) where the higher yield is attached to the non-CRR compliant bond. This could provide an estimate of the benefits investors attach to the preferential treatment. The latter does not only concern CRR capital weighting, but also other forms of preferential treatment granted to covered bonds by EU legislation such as the LCR preferential treatment for liquidity purposes (see section 2.1.2). While it is difficult to accurately estimate the effect on yields of a lower or no recognition of the asset class in the LCR delegated act[60], it is possible to use again a Danish example to provide an estimate of the spread in yields between bonds classified as level 1 and 2A[61] which amounts to 2 basis points and, between 2A and no eligibility at all, which amounts to 7 basis points[62]. Also in this case, non-eligibility for preferential treatment translates into higher yields for investors and higher costs for issuers. For issuers therefore, losing preferential treatment would translate into several basis points of increased cost of funding.

This option does not have any stakeholder support among the industry, but also among supervisors and it was not even mentioned in the EBA Report nor in the Parliament Report. Considering the significant disruption it would cause to well-functioning markets with no apparent compensating benefits and considering also the lack of stakeholders support, this option is discarded and won't be assessed.

The ultimate purpose of adjusting the preferential treatment would be to better target it at those covered bonds that exhibit risk characteristics coherent with the preferential treatment. Accordingly, judgements would need to be made on the features of an instrument that makes it less risky. In the end this approach would also be concerned with assessing structural features of covered bonds, albeit in an indirect way and would imply harmonization via the back-door. However, the harmonization of structural characteristics in one single piece of legislation (as envisaged under the four options above) appears a more efficient and coherent way to tackle prudential concerns.

---

59 ICF, 2017, pp. 48-49.

60 As the factors that cause them to be recognized for preferential treatment are themselves price sensitive it is difficult to isolate the effect of the LCR treatment.

61 The LCR requires that the liquidity buffer is made up of assets in the following categories: Level 1, Level 2a and Level 2b. The levels not only determine the maximum eligibility of securities for being part of the buffer (Level 1 to an unlimited extent, but at least 60% of the overall buffer; Level 2a maximum 40% and Level 2b maximum 15%), but also the haircut that applies to the market value. Under certain circumstances, covered bonds can be classified either as Level 1 or Level 2a or 2b.

62 ICF Report, 2017, p. 49.

5. ASSESSMENT OF POLICY OPTIONS

This section assesses the benefits and costs of the proposed options both at aggregate level and by relevant stakeholder groups. It will assess the benefits, of both direct and indirect nature, against the general and specific objectives outlined in section 3.

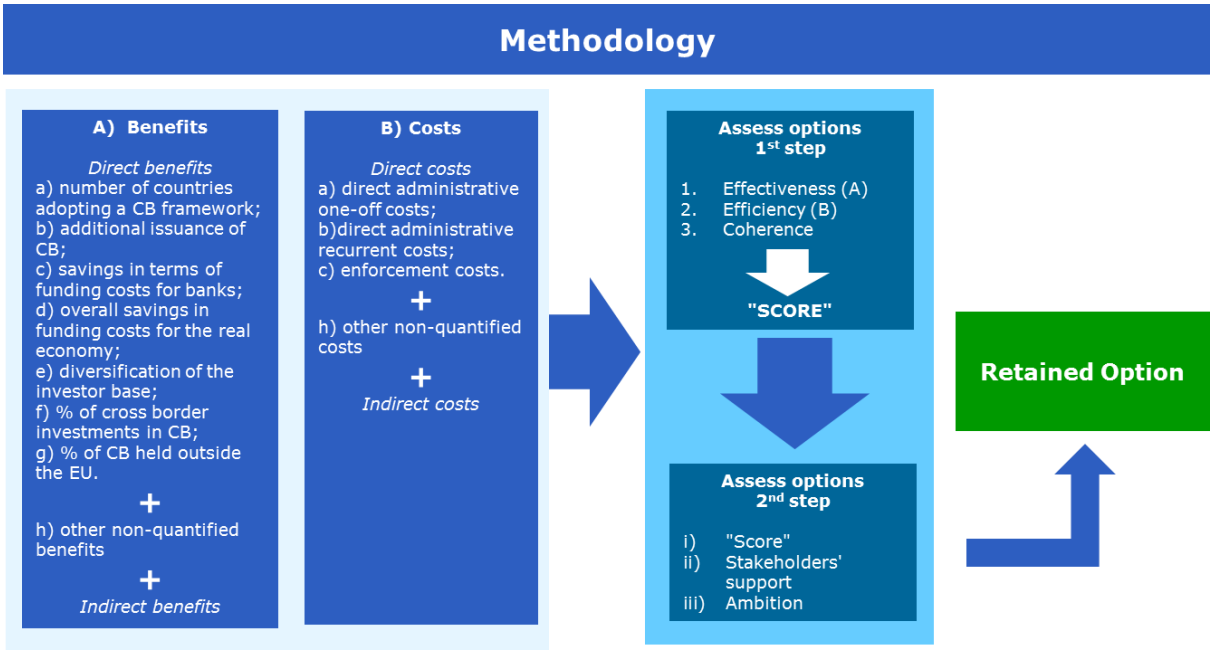
In order to assess how the different options fare with respect to the first general objective of tapping CMU potential, the section starts by presenting benchmarks that define the maximum benefits that can be expected from having harmonized EU covered bond markets. Similarly, a benchmark is provided for the direct costs arising to covered bond issuers, investors and supervisors. As regards the second general objective, addressing prudential concerns, the extent to which prudential concerns would be addressed under each option is more difficult to assess against a quantitative benchmark.[63] The assessment of the benefits and costs of each option against that objective will accordingly be of more qualitative nature.

In addition, the options will be assessed in terms of (1) how effective they are in achieving the objectives; (2) how efficient they are in light of associated costs; (3) how coherent they are with broader EU policies; and (4) how they affect key stakeholders (issuers; investors; supervisors; and, citizens).

The retained policy option will be one ensuring the best possible achievement of the stated objectives, while at the same time imposing the smallest costs and impacts on stakeholders and enjoying their support and being coherent with broader EU policy objectives.

Figure 8 summarizes the methodology followed to identify the retained option.

Figure 8. Methodology for assessing benefits and costs and choose the retained option



[63] To give an idea of the size of the concern, it could be noted that 32% of covered bonds are owned by banks which means almost €700 billion of assets in EU banks' balance sheets are investments in covered bonds.

5.1. Benchmark benefits and costs

The extent to which markets are likely to develop (objective 1) under each option will be measured through the following "benchmarks" that define the maximum benefits for each concerned dimension:

a) Number of countries adopting a covered bond framework in line with EBA best practices;
b) Additional issuance of covered bonds;
c) Savings in terms of funding costs for banks issuing covered bonds;
d) Overall savings in funding costs for the real economy;
e) Diversification of the investor base;
f) Share of cross border investments in covered bonds;
g) Share of covered bonds held outside the EU.

A similar approach will be followed to assess the costs of each option. The benchmark costs are derived from the costs currently borne by stakeholders in those jurisdictions which are more in line with the potential EU framework. In particular, the following benchmarks will be provided for the different categories of costs: (1) direct administrative one-off costs; (2) direct administrative recurrent costs; and, (3) enforcement costs. The different options will then be assessed in relative terms compared with benchmark costs.

5.1.1. Benchmark benefits

This section further outlines the specific benchmarks that would be used for assessing the options. Table 5 further below summarises the benchmarks benefits and their relationships with specific objectives.

a) Number of countries adopting a covered bond framework in line with EBA best practices

The benchmark for this benefit is represented by the maximum number of Member States required to introduce or amend their covered bond legislation in order to comply with the EBA best practices. According to the EBA, only one Member State (NL) complies in full.[64] **The benchmark number would therefore be 27**. This includes countries needing less significant amendments, countries needing an overhaul of their legal framework and countries needing to introduce a totally new framework from scratch. Under the baseline, one could expect eight countries to take action in order to comply with the EBA best practices. Based on the EBA Report, there are four countries that are already amending their national frameworks (CZ, FR, EL, and SK). In addition, other Member States have recently decided to set up a legislative framework (EE, LT, LV and HR).

b) Additional issuance

The Commission services estimate that the **total size of the currently untapped market potential for covered bond across the EU in terms of issuance could be up to EUR 342 billion**. This figure is based on the assumption that a fully harmonised regime could increase the use of covered bonds up to the benchmark level of 8.5 % of total loans in all EU Member States currently below that benchmark. The benchmark has been calculated as the median value of the ratio of covered bonds to total bank loans currently observed among Member

[64] EBA (2016).

States with established markets.[65] The benefit in terms of additional issuance would significantly accrue to new markets (EUR 63 billion out of EUR 342 billion). This share represents about one fifth of additional issuance, significantly above the current share of the same markets out of the outstanding total (1.3%). Annex 4 presents further details on these figures.

Under the baseline, the size of benefits in terms of additional issuance would be around one quarter of the benchmark or around EUR86 billion (less than proportional, considering the only large country in the sample would be France). This is confirmed by EBA analysis[66], according to which long-term secured funding for EU banks is expected to grow from EUR1.5 trillion in 2016 to approximately EUR1.6 trillion in 2019. 84% of this figure would be represented by covered bonds.

c) Savings in terms of funding costs for banks issuing covered bonds

The Commission estimates that the total savings in terms of funding costs for EU banks issuing covered bonds are between **EUR 2.2 billion and EUR 2.7 billion on an annual basis**[67]. This figure is based on three main assumptions:

(1) that a fully harmonised regime could increase the use of covered bonds up to the benchmark level of 8.5 % of total loans in all EU Member States (see benchmark b);
(2) that covered bonds provide a funding benefit in the range between 30 bps and 45 bps compared to unsecured funding[68];
(3) that a strengthened regime would result in an additional 5 bps funding benefit on all covered bonds, as estimated by the commissioned study (ICF, 2017).

While this figure should be seen as a benefit for all banks in the EU, the specific benefit for the countries where covered bond markets are already well developed is mainly linked to the third component (EUR1.1 bn). On the contrary, for new markets this benefit is mainly related to the issuance of covered bonds instead of unsecured bonds. Issuers in new markets would save between EUR 200 million and EUR 300 million on an annual basis in the long term. Annex 4 presents further detail on how these figures have been obtained.

Under the baseline, one could expect the size of benefits in terms of savings for banks would be around one quarter of the benchmark i.e. between EUR 0.5 billion and EUR 0.7 billion on an annual basis.

d) Overall savings in borrowing costs for the real economy

1. Lower funding costs are likely to be at least partially passed through to customers, freeing resources to be lent to households and firms. This would create wider benefits for the real economy. The Commission estimates that the potential overall **annual savings for EU**

65 See Annex 4 for further details on how this figure has been obtained.

66 EBA (2017a). The EBA survey is based on a sample of 155 banks from all EU countries asking about their funding plans for 2017-2019.

67 This benefit should be seen as a long-term benefit based on the assumption that the outstanding will be rolled over and gradually replaced by new issuance at lower interest rates. This implies that the benchmark benefit is not expected to be achieved immediately after the entry into force of the legislation. In the first years following entry into force, savings would result lower than the expected benchmark and their size would depend on the amount of yearly issuance.

68 Savings for banks should be seen as gross of the increased costs related to issuing covered bonds (see section on benchmark costs).

borrowers would be between EUR 1.5 and EUR 1.9 billion[69]. This figure has been obtained considering the savings in terms of funding costs for banks issuing covered bonds as calculated in point c) and using the estimated long-term pass-through rate by Illes et al. (2015) of about 70%.

The economic literature has extensively assessed how credit institutions' funding costs get translated into lending rates for the real economy. According to the prevailing consensus, this pass-through effect does function relatively well over the medium- to long-term, even though the short-term adjustment is imperfect[70]. Illes et al. (2015) identify a stable positive relationship between lending rates and bank funding costs for European countries both in the euro area and outside the euro area[71] over the period 2003–2014, comprising the pre-crisis and post-crisis periods. They estimate this pass-through rate at around 70%. The bulk of existing studies use samples of banks in advanced economies. It could be argued that thanks to the existence of a single banking rulebook applicable across all EU Member States, banking models of central and eastern European countries would become more structurally similar to the rest of Europe. In addition, some studies suggest that heterogeneity in the banking rates pass-through exists only in the short run (Gambacorta, 2008). The estimate of the pass-through provided by Illes et al. (2015) can therefore be deemed acceptable across all Member States.

Under the baseline, the benefits in terms of overall savings for the real economy would be around one quarter of the benchmark i.e. between EUR 0.4 billion and EUR 0.5 billion on an annual basis.

e) Diversification of the investor base

The cumulated share of investments in covered bonds by banks and central banks amounted to 63% in 2016 (see section 2.1.1.). In the baseline scenario one could assume that this share would go down to 50% in light of the end of the ECB purchasing programme (see section 4, baseline). This forecast seems relatively conservative given past experience.[72] In addition, one could expect that a unified EU covered bond markets would add another 10% to the share of covered bonds purchased by financial institutions other than banks. Taken together, this would bring the **benchmark to 60%**.

Under the baseline, the only effects in terms of diversification would come from the gradual phasing out of the ECB purchasing programme (around 50% of investors other than banks). There would be no further effects resulting from e.g. further market integration.

f) Share of cross-border investments

A proxy for the level of development of cross-border investments is represented by the share of inward investments in a Member State coming from other Member States out of the total of the covered bond market in that Member State. This share varies significantly: from 92% for the UK to 28% for Germany.[73] A possible estimate of a **benchmark for cross-border investments** would therefore be provided by the median of these values equal to **73%**.

69 Similar considerations hold as for banks' savings (benchmark c) for which see note 66.

70 For example, see Banerjee et al. (2013); Gambacorta (2008); Borio and Fritz (1995); De Bondt (2002); Hofmann and Mizen (2004); De Graeve et al. (2007); Kwapil and Sharler (2010); Darracq-Paries et al. (2014).

71 The total sample refers to: AT, DE, DK, ES, FI, FR, IE, IT, NL, PT, UK.

72 For example, in 2013 the year before the CBPP3 started, the share held by banks and central banks was 48%

73 ICF (2017a), p.30. This ranking only takes into account established covered bond markets.

Currently, most cross-border investments take place between countries that share similar characteristics in terms of covered bond legislation and property valuations standards. For example, in Finland almost three quarters of foreign investments come from Germany and other Nordic countries and in other Nordic countries this share is about two thirds (see section 2.1.1). It is difficult to foresee the effect of better harmonization at EU level for this regional integration of covered bond markets. However, the trend could go in the direction of lowering this share in order to better diversify the number of different countries investing in a given market. This would provide benefits in terms of less concentration, further financial integration and improved financial stability.

Under the baseline, cross-border investments would likely stay close to or slightly above the current level with slight improvements in some countries such as the Baltics if they decide to undertake a common legal framework. This would, however, represent a small percentage of the benchmark.

g) Share of covered bonds held outside the EU

The benchmark for the level of investments by third countries in the EU covered bond markets can be assumed to be the same as the level of investments by third countries for all debt securities issued in the EU which is estimated at an average of 16.5%. Currently the share as regards covered bonds is only 11% (see section 2.1.1). Hitting the 16.5% benchmark would translate into an **additional EUR 115 billion of investments in EU covered bond markets coming from outside the EU on a multi annual long term horizon**[74].

Under the baseline, third-country investments would likely stay at the current level.

Table 5 – Intervention logic diagram + benchmarks

Problems and consequences	Objective	Benchmarks
Consequence 1 **Untapped CMU potential**	General Objective 1 **Enhance CMU potential**	
Problem 1: Unevenly developed national markets	**Specific objective 1**: develop covered bond markets in all EU countries	a) Number of countries adopting a framework b) Additional issuance c) Savings of funding costs for banks d) Overall savings in borrowing for the real economy
Problem 2: undiversified investor base	**Specific objective 2:** diversify investor base	e) Diversification of the investor base
Problem 3: obstacles to cross border investments	**Specific objective 3:** tap potential for more cross border investments	f) Percentage of cross-border investments
Problem 4: low levels of investments from outside the EU	**Specific objective 4:** attract investors from outside the EU	g) Percentage of covered bonds held outside the EU
Consequence 2 **Prudential concerns**	General Objective 2 **Coherence of EU prudential regulation**	
Problem 1: diversity in national covered bond frameworks	**Specific objective 1:** align the structural characteristics of covered	No measurable benefit

[74] This number is based on the assumption that the average of 16.5% would be applied to the current outstanding covered bonds, not considering additional issuance. The result has to be seen as a multi annual long term benefit. The yearly amount has not been estimated.

	bonds across the EU	
Problem 2: capital preferential treatment not adequate	**Specific objective 2:** strengthen the requirements for capital preferential treatment in CRR	No measurable benefit
Problem 3: increased risks due to financial innovation	**Specific objective 3:** define a framework for soft bullets/CPTs	No measurable benefit

5.1.2. Benchmark direct costs

Issuing covered bonds implies significant one-off and recurring costs (due to establishing and running a covered bond programme), which are a function of several factors. Among them: (i) the size of the covered bond programme; (ii) the structure of the covered bond issuer; and (iii) country specific factors such as legal and supervisory requirements. It is possible to distinguish three main types of direct costs: (a) the initial costs of setting-up a covered bond programme; (b) the ongoing (annual) costs of running a covered bond programme; and (c) the costs of single issuance.

a) Direct administrative one-off costs

The upfront costs of setting up a covered bond programme, as estimated in the ICF study[75], comprise the following:

- Cost of setting up IT systems to support the administration and management of the programme including risk management, monitoring and reporting of the cover assets;
- Legal fees including the cost of a prospectus;
- Application and registration fees i.e. the cost of registering the programme with the regulator or supervisor;
- Investment bank fees: these are typically a function of maturity of the bond e.g. for a standard five year deal, investment banking fees would be of the order of 0.2% of the amount raised. Sometimes, an issuer does not pay any fees on the basis of an agreement that the issuer will use the investment bank for the first few bond deals and/or give that bank a disproportionate amount of the total fees payable on them; and
- Rating agencies' fees: a minimum set-up and first issuance fee of €65,000 (limited approach) to €100,000 (full approach) for Eastern EU issuers and €70,000- €150,000 for Western EU is charged by Fitch Ratings. S&P charges a standard fee of €85,000 for annual surveillance of a covered bond programme.

Total costs vary significantly between countries and banks, depending on the business model and on different arrangements not only with private parties but also with supervisors.[76]

For example, Denmark is the country where the upfront costs are the highest due to their specific business model based on specialist credit institutions and to the specific supervisory model which is very comprehensive and totally paid by banks (costs ranging between EUR2.2 million and EUR3.8 million per programme). The situation in other Nordic countries such as Sweden and Finland is similar. In France, upfront costs range between EUR1.6 million and EUR2.3 million. In Italy, they vary between EUR400,000 and EUR1.5 million. In the UK,

[75] 2017, ICF, pp.174-175.

[76] For example, in Denmark the supervisor charges the banks for the cost of their comprehensive supervision. Danish banks do not have the choice to outsource some of the costs to external providers.

between EUR750,000 and EUR3.4 million. Estimates for Germany are only partially available. However, it is possible to infer that costs belong to the upper hand of the spectrum.

On the other hand, there are countries with lower upfront costs such as Luxembourg (EUR100,000-350,000), Netherlands (EUR330,000-825,000), Belgium (EUR430,000-510,000) and Eastern European countries (for example Poland is around EUR400,000). The median of the minimum and maximum value is respectively EUR590,000 and EUR1.8 million and could be considered a benchmark for one-off direct costs. In this case, however, the benchmark has to be seen as the value towards which low-cost jurisdictions would converge, while high-cost jurisdictions are not expected to decrease their costs and would therefore not converge towards the benchmark.[77] Under the baseline, out of the eight Member States expected to take action, four (CZ, FR, EL, SK) are not undertaking changes that would significantly modify their current structure of one-off costs, while only the other four (EE, HR, LT, LV) are expected to increase their one-off costs towards the benchmark, while keeping the increase at a minimum. Overall, this would result in a very small move towards the benchmark.

b) Direct administrative recurrent costs

These costs typically include[78]:

- Staffing costs for running the covered bond programme;
- Costs of back office operations, including IT maintenance: these can be expected to be negligible once a covered bond programme has been set-up involving monthly running of reports or checking of accounting entries. Smaller issuers with less sophisticated IT systems might need to carry out manual intervention, in which case these would involve at most 0.5 full time equivalent;
- Cost of the cover pool monitor: this depends on whether the cover pool monitor is mandatory and if his tasks are carried out by external providers or by the supervisor;
- Cost of professional bodies e.g. ECBC (EUR8,000 per year) and national industry body;
- Cost of the covered bond label comprising the initial registration fee of EUR5,000 payable with the registration of a new cover pool, an annual fee for the label of EUR3,800 in subsequent years, an additional volume issuance fee of EUR1 per million of new issuance (capped at EUR5,000 per year; not payable on the first year of a new Label), the fees and expenses of the Bond Trustee and Security Trustee (if any), ranging from EUR7,500 to EUR72,600.

Total costs vary significantly between countries and banks, depending on the banking model and on different arrangements not only with private parties but also with supervisors. For example, in Denmark they are quite high, at around EUR2.2 million on an annual basis, because supervisory costs are paid annually by banks on top of their administrative costs. In France, they range between EUR0.5 and 1.8 million per year. In the UK, between EUR0.4 and 2.8 million. In other Member States, ongoing costs are lower, ranging between less than EUR100,000 (Italy and Portugal) and EUR475,000 (Netherlands).

The median of the minimum and maximum value ranges between EUR300,000 and EUR475,000 and could be considered a benchmark for recurring direct costs. In this case,

[77] The costs related to setting up and running a covered bond programme come from ICF (2017). For more details on direct one-off costs, see Annex 5.

[78] Estimates based on ICF (2017), in particular pp.175-177.

however, the benchmark has to be seen as the value towards which low-cost jurisdictions would converge, while high-cost jurisdictions are not expected to decrease their costs and would therefore not converge towards the benchmark.[79] Under the baseline, out of the eight Member States expected to take action, four (CZ, FR, EL, SK) are not undertaking changes that would significantly modify their current structure of recurring costs, while only the other four (EE, HR, LT, LV) are expected to increase their recurring costs towards the benchmark, while keeping the increase at a minimum. Overall, this would result in a very small move towards the benchmark.

The costs associated with each issuance belong to the same category of recurrent costs. They typically include the following[80]:

- Rating fees: Fitch rating charges fees on all covered bond issuance as a percentage of the total issue size. The fees range from 0.25 bps (limited approach) to 1.0 bps (full approach) in Western EU countries. A flat rate of 0.5 bps is charged in Eastern European countries. It should be noted that issuers often get 2-3 ratings for their issues;
- Legal fees per issue is typically either nothing or a very small amount, but for a small number of issuers (in particular those who do not issue from a standard programme), these could range from €100,000 to €300,000;
- Fees and expenses incurred in connection with the listing of the covered bonds on stock markets. These can range from €4,000 in UK to €150,000 in Sweden.
- Fees relating to ISDA documentations (Swaps), which depends upon the number of counterparties an issuer has;
- In some countries, audit fees are payable per issuance (for instance, in Hungary this represents about €20,000 per issue).

Issuance costs mainly depend on the size of the issuance, vary significantly from one issuance to the other and are negligible compared to total costs and as a result there is no dedicated benchmark.[81]

Overall, the costs of setting up and running a covered bond programme are quite high, and generally higher than issuing unsecured debt. According to the German association of Pfandbrief Banks (VdP), while covered bonds allow banks to save on the cost of their funding, the high costs that issuing covered bonds entails imply that the breakeven point is around 20 basis points. This means that if banks save less than 20 bp when they issue covered bonds, instead of unsecured debt, covered bonds are no longer convenient. However, compared to securitization, covered bonds are still considered a more efficient source of funding for banks. This is because covered bond costs can be spread across several issuances, which eventually results in lower operational costs for each issuance of covered bonds. The advantage of a covered bond programme is indeed that once set up and registered, multiple transactions can be issued under the programme i.e., each new issuance benefits from the existing structure of the covered bond programme and bears only a negligible fraction of the total costs. In contrast, for securitisation, each new issuance entails new costs. Covered bonds are thus regarded as a more efficient funding tool by issuers. In addition, from an investor's

[79] For more details on direct recurring costs, see Annex 5. The costs related to setting up and running a covered bond programme come from ICF (2017).

[80] 2017, ICF, pp.177-178.

[81] For more details on issuance costs, see Annex 5. The costs related to setting up and running a covered bond programme come from ICF (2017).

perspective, due diligence costs are lower for covered bonds, as it is a more standardised product.

c) Enforcement costs

To define a benchmark for enforcement costs two supervisory models are considered. One benchmark is represented by the **Danish model** which implies strong supervision and a comprehensive list of tasks all carried out by the supervisor itself with no possibility of outsourcing. Costs are borne by banks and annually paid to the supervisor. In Denmark, supervision of mortgage credit institutions (issuing covered bonds) is carried out by the Danish FSA. The Danish FSA does the following:

- Issuance of license: one off covered bond specific licensing;
- Periodic review and analysis of the data/documentation provided by the issuer[82];
- Periodic quality check of cover assets including checks on eligibility of assets and real estate valuations (including regular on-site visits);
- Periodic monitoring of the exposure of the covered bond programme to market risk and liquidity risk;
- Periodic checks of minimum mandatory over collateralisation requirements; and
- Evaluation of operational risks of the issuer.

Around 17 FTEs across different departments of the Danish FSA are involved in supervising covered bond programmes (of which roughly 3.5 FTEs are involved in on-site inspections of covered bond issuers). The average salary cost per FTE is DKK650,000 (~ EUR87,400). In addition, the average overhead per FTE is DKK390,000 (~ EUR52,450). The annual costs incurred by the Danish FSA for supervising covered bonds issuers can be estimated at ~ EUR2.4 million. Considering that there are only nine issuers in Denmark, the average cost of supervision per issuer would amount to EUR267,667. The average cost per covered bond programme can be estimated at EUR103,367 (based on ECBC data on the number of programmes equal to 23 in 2014 and 2015). The institutions under supervision pay for the costs associated with their supervision. The cost of running the Danish FSA is therefore, allocated to the different institutions under supervision based on different measures.

The second benchmark is represented by the **German model** which is also characterized by strong supervision, however this is not entirely carried out by the supervisor itself. Some tasks, such as the monitoring of the cover pool, are exercised by external contractors. In Germany, Department BA 57 of the Federal Financial Supervisory Authority (BaFin) is responsible for conducting cover pool audits at Pfandbrief banks at two-year intervals, either using its own staff (appraisers), or Cover Pool Administrators (CPAs) experienced in the area of Pfandbrief cover pool audits (selected through a tendering process). The cost of cover pool audits conducted at two year intervals for the year 2015 was €718,000 for CPAs audits (17 audits in 2015) and €224,000 for Bafin internal staff (8 audits in 2015). The average cost per audit was of €42,000 per CPAs and €28,000 for internal staff. Department BA 57 of Bafin total budget for 2015 was made up of direct costs of €1.55 million (of which direct staffing costs: €1.51 million) and overhead costs of €1.18 million for total costs of €2.73 million. Approximately 78% of Bafin BA 57 FTE is dedicated to covered bond supervisory activities. Assuming that a similar percentage of the budget is devoted to covered bond monitoring, this would mean that costs related to monitoring covered bonds amount to €2.13 million. While

[82] For instance, reports of mortgage banks to the Danish FSA are provided on the quarterly basis and cover credit risk exposure, market risk exposure and solvency risk.

this figure looks similar to the Danish total, it differs in respect to what it includes. For example, Bafin outsources some audits to external auditors and it does not perform the duties of the cover pool monitor which are exercised by external contractors. On the contrary, the monitoring of the cover pool is part of the supervisory activity of the Danish FSA. As a result of these differences, but also of the different number of issuers which allows economies of scale in the German case, the average cost per issuer would be significantly lower in Germany (€25,350) than in Denmark (€237,745 - €264,161). The costs not recovered from Pfandbrief banks are funded as part of BaFin's general budget (i.e. via cost allocation to supervised entities, where being a Pfandbrief bank would not imply specific treatment). For more details on supervisory costs see Annex 5[83].

Among the two models, the German one could be considered the actual benchmark, as it is close to the model of supervision that fits with the harmonized framework and, at the same time, its costs are lower compared with the Danish model. However, not all countries could be expected to converge towards the German benchmark. For several Member States, this convergence would imply a significant increase in costs for supervisors. Many jurisdictions could rather be expected to converge half way, the extent of the convergence depending on the chosen option. For example, there are jurisdictions such as Austria, Cyprus, the Czech Republic, Italy and Slovakia, where supervision is carried out by the banking supervisor and is embedded in the general supervision of the issuing credit institution. Their costs can be estimated to be low and mingled with the costs of the overall banking supervision. Converging towards the benchmark would entail significant costs for those jurisdictions. The same holds for Member States with non-existing covered bond markets. Specific resources would need to be dedicated to perform the duties and tasks of a special public supervision on covered bonds along the lines of the harmonisation framework. The size of the increase would depend on the chosen option.

Under the baseline, jurisdictions are expected to stick to their country model, therefore no convergence would be expected to take place towards the benchmark supervisory models.

In the remainder of the Section, the different options are assessed as regards i) their effectiveness in achieving the stated objectives, and ii) their efficiency in terms of costs that are incurred while achieving them.

5.2. Option 1 – Non-regulatory option

Under this option, harmonization would be encouraged on a voluntary basis through the use of soft tools such as the issuance of recommendations by the Commission. There would be no legislative action.

5.2.1. Benefits

Direct benefits

GO1 - Specific objective 1: without a coherent legislation establishing a framework for covered bonds at EU level, Member States would decide voluntarily whether or not to comply with recommended best practices. Member States with no framework in place could choose to stay without. According to the EBA 2016 Report, there are seven Member States that could be expected to take legislative action. They are the countries with amendments in progress (4:

[83] ICF, 2017, Annex 6.

CZ, FR, EL, SK) and countries with legislation on hold pending a Commission decision on whether or not to propose legislation (3: AT, IE, ES). To this, one could add the three Baltic countries (EE, LT, LV) plus Croatia who have recently decided to set up a legislative framework. In total, one could expect 11 countries to take action in order to comply with the EBA best practices. The size of benefits in terms of additional issuance and lower costs of funding for banks and for the real economy could be expected to be around one third of the benchmark.[84] This would be lower than for the other options.

GO1 - Specific objective 2: little investor base diversification would be expected except for the indirect consequence of the tapering of the ECB purchasing programme (see baseline scenario). However, this benefit will not be compounded by the benefit of a unified market. Therefore no additional benefit compared to the baseline is expected.

GO1 - Specific objective 3: cross border investments would likely stay close to or slightly above the current level with slight improvements in some countries such as the Baltics if they deliver a common legal framework compliant with the best practices. However, this would represent a small percentage of the benchmark. Therefore, additional benefits compared to the baseline could be expected to be small.

GO1 - Specific objective 4: third-country investments would likely stay the same. There would be no common third country regime (including equivalence provisions). The benefits of reciprocally recognising equivalence between third countries' regimes and the EU (as spelled out for option 2) would therefore not be achieved. No benefit expected compared to the baseline.

GO2 - Specific objective 1: the benefit of aligning the structural characteristics of the product with prudential regulation at EU level would depend on the number of Member States that take action to comply with recommended best practices. If, as noted above, Member States expected to comply were 11 out of 27, this would not fully address the prudential concerns. Some benefits would be achieved compared to the baseline, but they would likely be small.

GO2 - Specific objective 2: the CRR preferential capital treatment would not be changed. No benefit expected compared to the baseline.

GO2 - Specific objective 3: the treatment of new liquidity structures (soft bullets and CPT) would depend on Member States. In absence of Member State intervention, contractual agreements or market standards could fill the void. The size of benefits would depend on the number of stakeholders choosing to comply and on the alignment between market standards and EU recommendations.

Indirect benefits

Leaving any adjustment to the discretion of Member States has the advantage of avoiding any possible disruption to national regimes that currently work well and the associated costs to that disruption.

[84] Considering proportionality in this case has significant limits, however it can be considered acceptable a slightly lower than proportional effect as the group of countries is more biased towards small markets.

5.2.2. Costs

As it is difficult to predict how many Member States would decide to comply and to what extent, a quantification of costs would be difficult. What could be reasonably inferred is that one would expect lower costs than under the other options.

Direct costs

Under option 1, the costs of setting up and running a covered bond programme would not be expected to change significantly compared with the baseline, as Member States would likely tend to preserve the status quo and eventually change it only gradually. As they would only act on a voluntary basis, Member States would not be expected to significantly increase costs in their markets. Under this option, out of the 11 Member States expected to take action, four (CZ, FR, EL, SK) are not undertaking changes that would significantly modify their current structure of one-off costs and recurring costs, while the other eight (AT, EE, ES, HR, IE, LT, LV) would be expected to converge towards one-off and recurring benchmark costs. They include Spain, where costs could be expected to change significantly if action is taken to comply with EBA best practices. Overall, this would result in a move towards around one third of the benchmark. Due diligence costs for investors would be expected to stay the same. As there would be no changes to the CRR framework, there would be no transitional costs or additional burden on investors from adapting to new capital rules. Banks investing in covered bonds would avoid the costs of having to adapt to a new regulatory environment, while supervisors would not have to adopt new supervisory approaches.

Enforcement costs

Supervisory costs borne by public authorities as a result of monitoring activities in each national jurisdiction would not significantly change compared to the baseline, as Member States would likely tend to preserve the status quo and eventually change it only gradually. This could be different in Spain. However, as option 1 is based on voluntary harmonization, it is not easy to predict to what extent changes introduced in that jurisdiction would comply with EBA best practices and how much they would contribute to increase supervisory costs. Overall, a slight convergence could be expected to take place towards the benchmark supervisory costs.

Indirect costs

Leaving the development of covered bond standards across the EU to Member States and market-led initiatives, presents the risk of covered bonds' structural characteristics diverging and hence does not fully address the prudential concerns. This may undermine the international credibility of EU covered bonds and could result in a rethink by EU regulators on the requirements and modalities of their preferential treatment. Downsizing or repealing the preferential prudential treatment could lead to disruptions in existing well-functioning national markets and to costs for issuers in terms of increased interest rates (see section 4.6).

5.2.3. Overall assessment

Effectiveness, efficiency, coherence

The extent to which the stated objectives and related benefits would be accomplished depends on Member States' willingness to follow best practices. It would be up to them and banks to decide whether, when and how to implement the recommendations/guidelines. Even if Member States were to react quickly and introduce national legislation, a soft law action

would limit considerably the scope and depth of national initiatives. Moreover, without a coordinated effort, national initiatives are more likely to develop in different ways, potentially creating a set of different provisions and standards across the EU. This would change little compared to the current situation. As such, the incentive to issue and invest in covered bonds would remain limited to those Member States where markets already work well. At the same time, market-led mechanisms cannot guarantee the prudential treatment attached to covered bonds and without supervisors' overview, those standards would risk deviating in their content from what would be advisable from a prudential point of view. This option would minimize adaptation costs. However, low costs would be accompanied by low effectiveness in achieving the stated objectives, thereby suggesting this option would be scarcely efficient. The efficiency gained in the short-term by avoiding legislative action and minimizing adaption costs is outweighed in the longer term by the foregone benefits of a more coherent EU regime. Overall, the option would not guarantee the achievement of the objectives of the review in an effective, efficient and coherent way.

Winners and losers

On the basis of the above, Table 6 summarises the benefits and costs of option 1 for each category of stakeholders. Issuers would benefit from a partial lowering of funding costs and citizens would enjoy in their turn some lower borrowing costs as well. Costs would increase up to a limited measure for issuers and supervisors, while for investors and society no significant increase in costs is foreseen.

Table 6 – Impacts on different stakeholders of Option 1

	Issuers	Investors	Supervisors	Citizens
Benefits	↑	≈	≈	↑
Costs	↑	≈	↑	≈

Stakeholder views

While at the beginning of the consultation process, a majority of market stakeholders (in particular issuers) was in favour of this option, after the EBA Report has been published, clarifying the contours of a possible EU legislative initiative, only a minority of market stakeholders remained in favour of this option. The majority of them shifted towards supporting minimum harmonisation (option 2), as illustrated by the ECBC position. Moreover, option 1 is not favoured by a large majority of institutional stakeholders such as the EBA, the ECB, the Parliament, national and European supervisors. In addition many stakeholders, not only institutional ones, manifested their concern that market-led initiatives even if valuable could prove insufficient because they cannot be imposed on participants. While industry stakeholders consider the European "Covered Bond Label" a step towards better integration of the covered bond markets, most acknowledge that there are certain limitations to self-regulation, for example the fact that voluntary arrangements cannot form the basis for a specific regulatory treatment so need to be complemented by sound regulatory treatment at national or European level. Among Member States with the largest and well-established markets, France and Sweden used to be the two countries most sceptical of legislative action and most in favour of the non-legislative option.

5.3. Option 2 – Minimum harmonization based on national regimes

Under this option, a legal harmonized framework for covered bonds would be established at EU level. This EU framework would aim at a minimum level of harmonization across the EU, building on the characteristics of existing national jurisdictions and seeking to avoid disrupting well-functioning markets. Under this option, the previous Article 52 of UCITS would be replaced by a new Directive defining the structural elements of covered bonds and Article 129 CRR would also be adjusted.

5.3.1. Benefits

Direct benefits

GO1 - Specific objective 1: this option would imply mandatory national implementation of the objectives set out in the minimum harmonisation EU framework. All Member States would have to legislate in order to introduce a covered bond framework or to adapt the existing one to the requirements set out in the EU directive. This means achieving in full the benchmark benefit in terms of number of countries adopting a covered bond framework. However, the risk remains that the directive is not implemented completely, or that the national implementations leave a significant heterogeneity in the market given that Member States have a degree of discretion in how to implement the requirements set out in the Directive. It is reasonable to expect that once a coherent legislation is in place in each Member State along the lines of the Directive, this would stimulate the development of covered bond markets also in countries where currently they don't exist yet. The benchmark in terms of additional amount of covered bond issuance could be fulfilled if not fully, then to a large extent (one could expect between 50% and 75% of the maximum long-term benefit).
As reported in section 2.2, a national legislative framework for covered bonds is one of the main factors at the base of the development of a florid covered bond market. This is also corroborated by anecdotal evidence. A case in point is **Poland** which did not have a covered bond market in the past, despite favourable economic conditions.[85] Another non-EU example where the development of a proper legislation has fostered the birth and development of a florid covered bond market is **Canada**.[86]
Increasing the share of covered bond issuance, relative to unsecured debt, would help banks to lower the cost of their funding, again, achieving a large share of the estimated benchmark (between 50% and 75% of the maximum long-term benefit).
The impact of an EU directive will not only be felt in less developed markets, but also in well-functioning ones. Among the latter, a direct benefit that could stem from the EU directive is the improvement in the credit characteristics of the instrument that would lead to

[85] This was due to an outdated legal framework that lacked important structural features for investors' protection and was not aligned with EU standards. The EBRD provided technical assistance to the Polish Ministry of Finance to develop new covered bond legislation to update the old one and align it with European standards. The changes came into effect in 2016 and have been essential to foster covered bond issuance by Polish issuers allowing Polish banks to lower their reliance on deposits and on Western European parent companies. Currently, the Polish market stands at €2.2 bn of outstanding covered bonds having almost doubled between 2015 and 2016 from €1.3 bn.

[86] In June 2012, the Canadian government approved covered bond legislation, providing a legal framework for its biggest banks to tap the market. Canadian banks flocked to issue covered bonds in euros and dollars which now represent an important source of capital flows into the country's housing market. Covered bonds now finance nearly 10 per cent of the entire Canadian mortgage market, which is close to C$1.4tn in size, according to the Canada Mortgage and Housing Corporation. That proportion was 5 per cent in early 2013 and almost nothing in 2007.

improvements in their ratings and, therefore, to lower financing costs for issuers (see benchmark c). The specific benefit for the countries where covered bond markets are already well developed has been estimated by the Commission to amount to €1.1 bn annually. This figure has to be intended as part of the total benchmark benefit c).

Expanding the scope of covered bond markets is not only to be intended from the geographical perspective, but also in terms of issuers' characteristics. The new framework would introduce measures to allow the use of pooled covered bond structures and encourage the issuance by smaller banks.

GO1 - Specific objective 2: investor base diversification in line with the benchmark of 60%, could be reasonably achieved not only as an indirect consequence of the tapering of the ECB purchasing programmes as suggested in the baseline. Introducing mandatory strengthened requirements and more transparency for covered bonds would make the product safer and more attractive for more risk adverse investors such as asset managers, insurers and pension funds. At the same time, harmonizing the market would make the product more easily understandable and more liquid, attracting further all types of investors.

GO1 - Specific objective 3: it can be expected that harmonisation through legislative means could encourage and facilitate additional cross-border investments. While it is difficult to predict to what extent the 73% benchmark (see benchmark f) would be achieved, an improvement in that direction could be expected compared to the baseline. In addition, an improvement also in terms of diversification of EU investors' geographic base in domestic markets could be expected as national systems would become more similar. This would be an advantage also for a well-established market like Germany which currently is the main investor not only in its domestic market but is also the main foreign investor in the EU with 55% of all investments in the Union. Enlarging the choice of markets where German investors can find instruments of a similar credit quality to their Pfandbrief, would provide more investment opportunities for them and will help lower concentration risks.

Another dimension of the cross-border objective is related to cover pools which should comprise assets coming from across the EU. Removing legal obstacles to cross-border cover pools, could increase their significance. This would be particularly relevant in small Member States where the small scale of mortgage operations may necessitate cross-border cover pools. For example cross-border banks will be able to lend to residents of small countries and include their mortgages in their cover pools. Moreover, pooling mortgages across geographies would represent a cost-efficient way to fund mortgages, offering, at the same time, diversification to investors.

GO1 - Specific objective 4: it could be expected that a harmonized framework at EU level would reduce due diligence costs for third-country investors. Differences in legal frameworks across EU jurisdictions require greater investment in credit analysis and legal research to be able to analyse country-specific products. Increased comparability and transparency deriving from a legally harmonised framework may enhance third country investors' confidence in EU covered bonds and contribute to foster their investments in the European market. In addition, where third countries have similar covered bond frameworks in place, an equivalence regime might be envisaged for reciprocal recognition of preferential prudential treatment. If the EU preferential treatment is granted to covered bonds issued outside the EU, this would broaden the scope of EU investors' possibilities, providing more attractive risk/reward propositions for

them[87]. If, at the same time, third countries which have in place preferential treatment similar to the European one, decide that covered bonds issued in the EU are eligible for their preferential treatment, this would open new markets for European banks selling covered bonds outside the EU. As the experience with the introduction of LCR favourable treatment in 2015 suggests, the fact itself of granting preferential treatment may foster an increase in investments of significant size[88]. Finally, the new EU covered bond framework may represent a benchmark at global level, providing third country regulators with a blueprint to further develop their own legal frameworks. All these elements could contribute to the achievement of a significant portion of the benchmark of 16.5% of third countries investments in EU covered bond markets. This could translate into up to €115 billion of additional investments in EU covered bond markets coming from outside the EU on a long term multi annual horizon.

GO2 - Specific objective 1: a legal harmonization along the lines of the EBA report would be beneficial in terms of an improved coherence between covered bond structural characteristics and covered bond preferential treatment at EU level. This would solve concerns on the alignment between the structural characteristics of the product and the preferential treatment. Moreover, this coherence would strengthen the international credibility of EU covered bonds regime. This would be particularly beneficial for well-established markets which make significant use of the preferential provisions in EU legislation.

GO2 - Specific objective 2: Eligibility conditions for CRR preferential treatment would be strengthened. Strengthening the credit characteristics of the instrument will provide benefits for investors, but it would also translate into additional costs for issuers. While costs and benefits for the two categories may cancel each other out, the final outcome of a more stable and financially sound market for covered bonds and the resulting financial stability of funding for EU banks translate into a net gain of welfare for the society at large.

GO2 - Specific objective 3: some rules would be introduced to define principles that must be respected in order for a soft bullet/CPT covered bond to be recognized compliant with the European definition of covered bond as envisaged in the directive. This would guarantee coherence between the new features and the preferential treatment granted to all covered bonds, including soft bullets and CPT. At the same time, liquidity requirements would be introduced in the directive, while implementing details would be left to Member States. As the extendible maturity structures (soft bullets and CPT) affect the extent of liquidity risk, Member States could choose to use those structures as partial substitutes of liquidity buffers. This could result in a situation where issuers would have the option to choose between adopting extensible maturity structures and applying a liquidity buffer to the cover pool. This choice could reasonably trigger a conversion of a share of hard bullets into extendible maturity structures. Even if it could be reasonably expected that this conversion would happen in those countries where liquidity requirements are currently not in place[89], an estimate of the share of the conversion is difficult to predict. The change in structures may not have a major impact in terms of pricing, as currently the hard/soft bullet distinction does not represent a strong driver of prices[90]. Indeed, the one-off cost of converting such bonds for issuers was

87 For example, the lower correlation of non-EU covered bonds to an existing portfolio of EU issued covered bonds is an important contribution to stability, in particular for bank treasury investors.

88 The 18% increase in issuance between the years 2014 and 2015 is partly due to the entry into force of the LCR requirements the same year.

89 Countries where a liquidity requirement rule is in place are 9: Belgium, Cyprus, Denmark, France, Germany, the Netherlands, Poland, Romania and Slovenia.

90 ICF (2017), pp. 101-103; EMF and ECBC, 2017, Market Insights & Updates, February 2017, p. 6

reported at 0.05 per cent (the standard fee paid recently by several covered bond issuers when requesting bondholder consent for such a conversion), while the spreads on covered bonds with extendible structures do not appear as systematically different from hard bullet structures in the current context. The main costs in terms of increased risks would concern investors, as this shift of issuance towards the new liquidity structures would imply a significant shift of the liquidity risk from the issuer to the investor. One cannot exclude therefore that the yield differentials on covered bonds with extendible structures could become more material in times of systemic stress.

Having a definition in place at EU level for the new structures and setting out principles for how to manage the interaction between liquidity buffers and extendible structures would be important for keeping risks under control.

Indirect benefits

In terms of overall savings in funding costs for the real economy, a significant portion (between 50% and 75%) of the benchmark of between €1.5 bn and €1.9 is expected to be achieved under this scenario.

Another indirect benefit of introducing a covered bond legislative framework could be a reduction in pro-cyclicality in bank funding. This reduction would be the result of conflicting forces. There are some characteristics of covered bonds that go in the direction of increasing pro-cyclicality:

- In good times, covered bonds could contribute to feed the demand for real estate and through this channel to inflate real estate bubbles. For example, right now in Canada the booming real estate is also sustained thanks to covered bonds which, since their introduction, have contributed to finance an increased share of the mortgage market;
- Requirements of minimum over collateralisation are pro-cyclical. In scenarios of declines in property prices, the sources available to fund over collateralisation may prove inadequate. If over collateralization is mandatory to maintain the covered bond label, increasing pressure to add collateral to the cover pool may contribute to decreasing banks' lending capacity.

However, especially in adverse market scenarios, covered bonds still show less pro-cyclical features than alternative funding sources:

- Values of the assets in the cover pool are not marked to their market value on a regular basis. Mortgage cover pools backing covered bonds are only ‘marked to market’ to the extent that a house price depreciation causes a deterioration in LTV ratios. LTV ratios are the only link through which a decline in real estate prices can affect the cover pool. Only in this case, banks would be required to substitute assets in the cover pool;
- As illustrated during and after the financial crisis, covered bonds proved to be a less pro-cyclical source of funding for banks than unsecured debt. Covered bonds proved to be relatively price stable whereas the volatility of senior unsecured debt issued by financial institutions has been much higher. While unsecured lending completely dried up, covered bond markets remained open for business.

Under option 2, LTV limits and overcollateralization requirements (the main pro-cyclical components of covered bonds) will only be envisaged for eligibility criteria under CRR art 129, while no LTV limit or overcollateralization requirement would be envisaged in the

directive, in line with the EBA advice. In this way, in times of stress and of declining real estate prices, the worst consequence could be the loss of the eligibility for the capital preferential treatment. However, the instrument would remain in the realm of the general covered bond definition as a fall out option, limiting negative consequences for banks and pro-cyclicality effects.

Overall, under option 2, the aspects of counter cyclicality would prevail and this would translate into an indirect benefit.

5.3.2. Costs

Direct costs

Under option 2, it would be reasonable to expect that costs increase more significantly than under option 1. Adaptation costs may arise from:

- Existing bonds and programmes would need to be grandfathered. However, new rules would likely, in most cases, be accommodated within existing covered bond programmes. Largest markets with largest issuances would reasonably minimize changes to existing programmes in their national legislation. In addition, most of the amendments foreseen under this option would increase bond holder protection and, therefore, can be expected to obtain their consent (where this is needed) or can be changed without causing controversy. Therefore, we wouldn't expect these costs be significant, apart for some exceptions (see below the case of Spain);
- One-off costs for issuers to manage the transition to the new set of rules. These would take the form of administrative costs for implementing the changes, for example as a result of changing legal documentation or amending IT systems or requiring additional legal advice or credit rating valuations. It is likely, that these one-off costs would be higher in those countries which currently enjoy lower upfront costs, as they would have to align with a new system more similar to the high-cost model. For example, according to market stakeholders, potential one-off costs to adapt IT systems to meet the new EU level transparency requirements would range between zero and €500,000[91] depending on the jurisdiction.

One-off direct costs for setting up a covered bond programme would then be expected to converge towards the range of between €590,000 and €1.8 million (see benchmark). It could be estimated that countries with lower direct one-off costs will move in the direction of high-cost countries as under option 2 there will be a convergence towards the strongest credit characteristics of the most developed and high-cost markets. At the same time, high-costs jurisdictions are not expected to decrease their one-off costs.

Recurring direct costs would be expected to converge towards the range of between €300,000 and €475,000 per jurisdiction. They might result from increased audit and management fees, payment of a fee to a cover pool monitor which did not exist before, other supervisory and regulatory new costs. These costs would presumably be higher wherever these features are not currently envisaged. For example, recurring costs would increase in countries where cover pool monitors are currently not required. In Finland, there is currently no requirement for a

[91] ICF, 2017, p.127 based on a survey of 67 stakeholders (mainly issuers) carried out in February 2017.

cover pool monitor and its introduction could cost up until €576,000 per year[92]. In general, even when the cover pool monitor is required, new rules enhancing his competences and duties could on average increase his costs by 10-20% which would translate into incremental recurring costs ranging between €2.4 and €4.8 million across the EU[93]. Another example is provided by supervisory and regulatory costs which would likely increase in those Member States where supervision is currently following a "light touch" approach. In those countries, increasing costs for supervision would be likely paid by issuers. For example, in Austria, the Czech Republic and Italy, the introduction of programme licensing arrangements could cost issuers up to €1 million.[94]

Direct costs are not expected to increase for issuers as a consequence of introducing the EU label for covered bonds. As explained in section 4.3, issuers would be able to (voluntarily) use this label when marketing their bonds, provided that the product complies with the requirements set out in the directive. As no additional labelling process or monitoring of compliance is envisaged, extra direct administrative costs are not expected to arise for issuers.

Spain would be the most affected EU country. Under option 2, the Spanish covered bond law would need to undergo substantial changes, particularly concerning the establishment of a cover pool, the segregation of the cover assets and new transparency requirements. There are two particular features of the current Spanish law that are problematic in relation to the objective of minimizing transition costs:

- Covered bond holders have a claim over the entirety of the eligible assets held by the bank. A new law establishing a cover register would directly contradict this in that it takes assets away from the existing covered bond investors;
- The statutory over-collateralisation is exceptionally high (25 per cent for mortgage covered bonds). Under option 2, this number would likely be reduced but this would be detrimental to existing bondholders. Any enforced change that could be seen to be detrimental to bond holders would generate potentially substantial legal issues and increase grandfathering costs.

Any transition arrangements in Spain are further complicated by the very high number of bonds outstanding, the high number of programmes (40), their diverse formats and the fact that the last final maturity of a bond issued under the current law is 2046. Moreover, Spanish banks are more reliant on covered bond funding than other countries' banks. However, costs come with benefits as well. The new features envisaged under the directive would be credit positive for Spanish covered bonds and this would help lowering their interest rates and the required level of overcollateralization by credit rating agencies (currently rating agencies ask up to 157% of overcollateralization for Spanish covered bonds to compensate for the perceived weaknesses in their regulatory framework). Another positive element would be the implementation of a soft LTV limit which could replace the current hard LTV limit and would therefore allow Spanish banks to increase the pool of eligible assets and to issue more covered bonds. Finally, clarifying the final outcome of the process would help stakeholders manage the transition smoothly. Until now the Spanish Treasury carried out consultations on potential

[92] Nine programmes multiplied by the European average cost of a cover pool monitor of €64,000. Source: ICF, 2017, p. 112. However, cover pool monitor tasks could be attributed to the competent authority. In this case, costs would be borne by the supervisor.

[93] In 2015, there were 371 covered bond programmes in EU Member States. Source: ICF, 2017, p.112.

[94] ICF, 2017, p.115. €13,000 average licencing costs across EU multiplied by the 79 programmes existing in the mentioned countries.

changes on the legal framework without reaching any clear conclusion and this prolonged uncertainty is starting to negatively affect the market.

While costs are expected to increase for issuers under option 2, the same does not apply to investors. The credit enhancing features of rules foreseen under option 2 would, on the contrary, lower due diligence costs for investors and turn into a benefit for them.

Enforcement costs

Supervisory costs borne by public authorities as a result of monitoring activities would change compared to the baseline especially for those Member States where supervision is currently following a light touch approach. In five EU jurisdictions (Austria, Cyprus, the Czech Republic, Italy and Slovakia) the system of supervision does not match the requirements that a new EU law would define under option 2. In Austria, the Czech Republic, Italy and Slovakia covered bond programmes do not need to be approved, in Austria the framework does not set out the supervisor's duties and powers, in Cyprus the supervisor does not have to review operational practices as part of the approval process. In all those Member States, specific audits on the cover pool are not part of the supervisor's duties and tasks. Adapting the current supervisory system to the enhanced duties and powers that the new framework would envisage for supervisors under option 2, would imply increasing costs for light touch jurisdictions to converge towards the benchmark. However, those jurisdictions are not expected to fully reach the benchmark under option 2 as Member States would likely use their space of manoeuvre envisaged under this option to minimize the increase in enforcement costs. To what extent benchmark costs will materialize will depend on the choices exercised by each Member State.

Direct costs are not expected to increase for supervisors as a consequence of introducing the EU label for covered bonds. As explained in section 4.3, supervisors would be expected to monitor compliance with the conditions under which such label could be legally used as part of the special public supervision of the covered bond framework. An ex-ante control of the use of the label would not be necessary and the costs related to the monitoring of the label would be part of the enforcement costs discussed above.

Indirect costs

Introducing or amending covered bond legislation could have indirect costs for unsecured creditors. This type of impact can be considered under two different angles: the legal and the economic one. Under the legal perspective, the concept of dual recourse would require Member States to acknowledge in their insolvency legislation the priority of the covered bond holder on the cover pool and his *pari passu* claim (vis-a-vis unsecured creditors) on the insolvency estate of the issuer. Two situations may arise:

– In those Member States where covered bond legislation is in place, national insolvency law has already been amended to implement the dual recourse principle. Indeed, this principle is the only one complied with by all Member States according to the EBA assessment of best practices. According to the EBA Report 2014, a majority of EU jurisdictions have introduced bankruptcy provisions that are specific to the event of default of the covered bond issuer. Only Bulgaria, Finland and the Netherlands do not have any covered bonds-specific insolvency provisions embedded in their legal frameworks. In Germany and Denmark, national rules regarding insolvency require that after bondholders are fulfilled by the cover pool, the remaining collateral is transferred to the issuer's general insolvency estate to serve unsecured creditors;

– A slightly different situation may characterize those countries where currently there is no covered bond legislation in place. This situation would need some specific amendments to the insolvency law to accommodate the introduction of covered bonds and the related dual recourse principle.

Overall, the legal impact of the introduction of the directive on unsecured creditors and on national insolvency law should be very limited and the current status and ranking of unsecured creditors is not expected to worsen significantly in case of insolvency.

Another aspect of the same problem is of economic nature and regards the fact that a credit institution increasing its issuance of covered bonds can affect unsecured creditors through the increased level of asset encumbrance. It has been argued that an increase in the number of covered bonds issued has potentially adverse effects on the stability of the banking system as it reduces the assets available for unsecured bond holders and other creditors. This could lead to a lower credit rating on the unsecured bonds, a higher yield demanded by unsecured investors and, in extreme scenarios, more difficulties in refinancing maturing debt.[95]

In response to this concern and following a specific request by the ESRB, since 2015 the EBA has begun to collect data that allow an assessment of the actual encumbrance levels and sources in the EEA banking system.[96] According to the EBA, encumbered assets relative to total assets was 26.6% in December 2016.[97] This represents a one percentage point increase compared with 2015, where the asset encumbrance ratio was 25.4%. The corresponding value for December 2014 was 25.1%. This modest uptick in the level of total asset encumbrance in 2016 is not a cause of concern according to the EBA.

Nevertheless, large and established covered bond markets (most notably Denmark and Sweden) show a high level of asset encumbrance. However, there are some qualifications:

- Covered bonds do not represent the main source of asset encumbrance. Repos represent the single most important source of encumbrance at 27%, while covered bonds represent 21%;
- The implications of the encumbrance level depend upon specific features of the domestic financial market and the business models of the credit institutions. The high level of encumbrance in the Danish financial system is a function of the dominance of specialised mortgage lenders who are wholly reliant on covered bond funding. As market indicators show, the relatively high encumbrance in Denmark compared to some other Member States is not reflected by a higher risk premium demanded by investors; and
- According to the ECBC, covered bond encumbrance tends to be less pro-cyclical in times of turmoil than other forms of encumbrance.[98] For example, collateral posted under repos is typically marked to its market value on a regular basis, whereas mortgage backing covered bonds are only ‘marked to market’ to the extent that a house price depreciation causes a deterioration in LTV ratios, thus covered bonds are far less volatile and less pro-cyclical in an adverse market scenario.

While an EU framework is expected to increase the use of covered bonds, and hence use of encumbered collateral, there are features of the framework that could mitigate concerns

95 Deutsche Bundesbank 2016).

96 Data provided regularly by a sample of 196 banks from 29 EEA countries. The sample covers at least 3 banks from each country including all large ones.

97 EBA (2017b).

98 ECBC Position Paper on Asset Encumbrance, June 2013

related to asset encumbrance. For example, some of the requirements envisaged in the new framework should contribute to reduce over-collateralisation levels and therefore the level of asset encumbrance in the EU banking system. This would affect the statutory requirements of OC in national legal frameworks. Currently, they vary between 0 per cent and 25 per cent across Member States[99]. The most frequently used values are 2 per cent (typically because this is the required over-collateralisation for exemption from clearing obligations for associated derivatives under EMIR) and 5 per cent. 12 Member States have OC statutory levels higher than 2% and 5 Member States have statutory requirements higher than 5%. As under option 2 the EU framework would require a minimum statutory OC level of between 2% and 5% depending on the quality of the assets in the cover pool, this could potentially contribute to lower OC levels across the EU[100]. Furthermore, credit rating agencies may have an impact. Over-collateralisation levels required by rating agencies are typically high, especially where national covered bond frameworks are considered weaker in terms of investor protection. Requirements by credit rating agencies could reach 100% or even 150% of overcollateralization in those jurisdictions considered weaker by investors[101]. Strengthening investor protection across the EU might contribute to induce rating agencies to lower their OC requirements thus reducing aggregate encumbrance levels in the banking system for any given quantity of covered bonds outstanding.

Securitization is not dissimilar from covered bonds in terms of effects on unsecured creditors. In both cases, exposures underlying the securitisation and the covered bond are not available to unsecured creditors and are reserved to investors in the securitisation/covered bond. Using these methods of funding do remove assets that otherwise would have been available to fulfil unsecured creditors. This is the risk of being unsecured which is also reflected in the pricing of unsecured debt compared to secured one.

5.3.3. Overall assessment

Effectiveness, efficiency, coherence

Overall option 2 is considered to achieve most of the objectives of the initiative at reasonable costs by combining enough flexibility to accommodate Member States features with the objective of achieving coherence at EU level for covered bonds. This option would have the best chance of being effective in achieving stated objective, while at the same time being efficient, minimizing disruption and transition costs. Of the options considered, it therefore represents the most efficient and effective way to address the problems envisaged in section 2.

Winners and losers

On the basis of the above, table 7 summarises the benefits and costs of option 2 for each category of stakeholders. Issuers would benefit from a lowering of funding costs and citizens would enjoy in their turn some lower borrowing costs as well. Investors would benefit from a stronger regime, however some details left to Member States' discretion could introduce weaknesses (for example in the relationship between extendible structures and liquidity buffer). Costs would increase for issuers and supervisors, while they would decrease for investors and society.

---

99 In Spain, for example, the minimum regulatory OC is currently 25 per cent, or circa €70 billion.

100 It is worth noting, however, that there is no intention to impose a constraint on national regulators wanting to set a higher level than the EU minimum. It is also worth noting that there is nothing to stop issuers setting higher levels of OC to preserve credit ratings or investor confidence.

101 In Spain, credit rating agencies might ask up to 157% of overcollateralization to issuers.

Table 7 – Impacts on different stakeholders of Option 2

	Issuers	Investors	Supervisors	Citizens
Benefits	↑↑	↑	↑	↑↑
Costs	↑↑	↓	↑	↓

Stakeholder views

Option 2 is favoured by a large majority of stakeholders: institutional, supervisors, Member States and industry. The EBA, the ECB, the Parliament, national and European supervisors favour this option. This is the option that fits with the EBA Report and the EP Report. A majority of Member States is also favourable to this option, including all those with the largest markets. In particular, Member States with the two largest and well-established markets such as DE and DK are favourable to this option as they see in the legislative harmonization the opportunity to extend the soundness and stability that characterize their markets to the rest of the EU. France and Sweden were initially the most sceptical and were more in favour of option 1, but they eventually converged on this option after the publication of the EBA Report. Italy and Spain would suffer the most significant increases in costs among the largest markets. In spite of this, however, both countries support option 2. Spain, for example, is aware of the need to change the current covered bond framework and has carried out several consultations without reaching clear conclusions. The EU initiative is seen as an opportunity to provide clear guidance on the way forward and start delivering a long-awaited change.

Industry is split between those who would prefer option 1 and those who would prefer option 2, while no support at all is given to options 3 and 4. The ECBC representing almost all issuers in the market and investors is clearly in favour of option 2. According to a survey conducted by ICF in February 2017 on a sample of 65 stakeholders (mainly issuers)[102], a harmonised legislative framework for covered bonds at EU level along the lines of option 2 would deliver the following benefits (in percentage the number of respondents agreeing):

- Reduce regulatory fragmentation (74 per cent);
- facilitate reduction in asset and liability mismatches (68 per cent);
- improve ease and quality of due diligence and credit analysis of covered bonds (lower barriers to invest) (60 per cent);
- facilitate developments of CB framework in all the 28 EU countries in line with CMU agenda (60 per cent);
- improve the efficiency of monetary policy transmission (higher availability of high quality collateral) (60 per cent)
- facilitate capital market access to small-medium issuers (58 per cent);
- reduce investors' reliance on external ratings (54 per cent).

5.4. Option 3 – Full harmonization

This option would involve the design of a new fully harmonized regime for covered bonds. In doing so, it would need to define every detail of a sound covered bond regulatory framework

[102] ICF, 2017, pp. 50-51

and would not thus follow a principle based approach. The legislative instrument envisaged to implement this option would be a regulation.

5.4.1. Benefits

Direct benefits

GO1 - Specific objective 1: as this option would entail a regulation to define covered bonds rather than a directive, it would be directly applicable to all Member States without having to wait for them implementing the directive and without bearing monitoring and implementation costs. Any risk of non-compliance with the directive would be eliminated. The full benchmark benefit in terms of number of countries with a covered bond framework in place would be achieved immediately at the entering into force of the regulation. It is reasonable to expect that once a compelling regulation is in place across the EU, this would stimulate the development of covered bond markets also in countries where currently they don't exist yet (see explanation provided in option 2). The benchmark in terms of additional amount of covered bond issuance is expected to be almost fully achieved (between 75% and 100% of the maximum long-term benefit). Increasing the share of covered bond issuance vs unsecured debt, would help banks to lower the cost of their funding achieving most of the benchmark (between 75% and 100% of the maximum benefit). The impact of an EU regulation would not only be felt in less developed markets, but also in well-functioning ones. Among the latter, a direct benefit that could stem from the EU regulation would be the improvement in the credit characteristics of the instrument that would lead to higher credit ratings and, therefore, to lower financing costs for issuers (with benefits of €1.1bn of yearly savings in line with calculations in benchmark c).

Expanding the scope of covered bond markets is not only to be intended from the geographical perspective, but also in terms of issuers' characteristics. The new regulation would introduce measures to allow the use of pooled covered bond structures and encourage the issuance by smaller banks.

GO1 - Specific objective 2: investor base diversification in line with the benchmark of 60%, could be reasonably achieved not only as an indirect consequence of the tapering of the ECB purchasing programmes as suggested in the baseline. Introducing mandatory strengthened requirements and more transparency for covered bonds would make the product safer and more attractive for more risk adverse investors such as asset managers, insurers and pension funds. At the same time, a full harmonization of the market would make the product more easily understandable and more liquid, attracting further all types of investors,

GO1 - Specific objective 3: the fact that there would be no discretionary space for Member States to interpret and implement norms to suit their specificities, would make the system more homogenous and better integrated and this should foster further cross border investments. The 73% benchmark could be expected to be hit. In terms of cross-border cover pools similar considerations hold as under option 2.

GO1 - Specific objective 4: full harmonization provided through a regulation would favour investments from third countries, would foster the possibility to establish an equivalence reciprocal regime and will also provide all jurisdictions in the world with a law text representing a benchmark at global level. All these elements would contribute to the achievement of the benchmark of 16.5% of third countries investments in EU covered bond

markets. This would translate into up to €115 billion of additional investments in EU covered bond markets coming from outside the EU on a long term multi-year horizon.

GO2 - Specific objective 1: a full harmonization along the lines of the EBA report, only more detailed, would be beneficial in terms of coherence between covered bond structural characteristics and covered bond preferential treatment at EU level. There would be no discretionary space for Member States to interpret and implement norms to suit their specificities and this would better guarantee full coherence between covered bonds structural characteristics and their preferential prudential treatment at EU level. Moreover, under this option, one could envisage the SSM also conducting the special supervision of covered bonds for the largest banks issuing covered bonds in the euro area. This would further strengthen homogeneity in the way rules are applied and enforced. Benefits of comprehensive harmonization would therefore fully be achieved with less risks of divergence than under option 2. Moreover, this coherence would strengthen the international credibility of EU covered bonds regime. This would be particularly beneficial for well-established markets which make significant use of the preferential provisions in EU legislation.

GO2 - Specific objective 2: Eligibility conditions for CRR preferential treatment would be strengthened in a way similar to option 2. While strengthening the credit characteristics of the instrument will provide benefits for investors, it would also translate into additional costs for issuers. While costs and benefits for the two categories may cancel each other out, the final outcome of a more stable and financially sound market for covered bonds and the resulting prudentially sounder funding for EU banks translate into a net gain of welfare for the society at large.

GO2 - Specific objective 3: rules would be introduced to define principles that must be respected in order for a soft bullet/CPT covered bond to be recognized compliant with the European definition of covered bond in the regulation. This would guarantee coherence between the new features and the preferential treatment granted to all covered bonds, including soft bullets and CPT. In addition, as the extendible maturity structures (soft bullets and CPT) affect the extent of liquidity risk, the regulation would define strict rules for how to manage the interaction between liquidity buffers and extendible structures instead of leaving this choice to Member States in order to keep risks under control.

Indirect benefits

In terms of overall savings in funding costs for the real economy, most of the benchmark of between €1.5 bn and €1.9 (between 75% and 100% of the maximum benefit) could be expected to be achieved under this option.

Concerning the indirect effects in terms of pro-cyclicality, similar considerations hold as for option 2. Also under option 3, those features of covered bonds which favour pro-cyclicality such as LTV limits and overcollateralization requirements would only be envisaged for eligibility criteria under CRR art 129, and excluded from the directive. In this way, in times of stress and of declining real estate prices, the worst consequence could be the loss of the eligibility for the capital preferential treatment. However, the instrument would remain in the realm of the general covered bond definition as a fall out option, limiting negative consequences for banks and pro-cyclicality effects. Overall, under option 3, the aspects of counter cyclicality would prevail and this would translate into an indirect benefit.

5.4.2. Costs

Direct costs

Under option 3, it would be reasonable to expect higher costs than under option 2, especially in terms of one-off adaptation costs. Option 3 would indeed impose a one-size fits all approach which would imply more significant changes in every jurisdiction than under option 2. Instead of a principle based approach which could be adapted to different national circumstances, detailed rules will need to be specified under option 3 and this would also entail a significant amount of level 2 legislation. The major impacts will be in terms of one-off and transition costs:

- Existing bonds and programmes would need to be grandfathered. While under option 2 it could be expected that national legislators would aim at minimizing transition costs, a regulation introducing more radical changes compared to the status quo would increase significantly the costs of the transition and adaptation of the current programmes;
- One-off costs for issuers to manage the transition to the new set of rules. These would take the form of administrative costs for implementing the changes, for example as a result of changing legal documentation or amending IT systems or requiring additional legal advice or credit rating valuations. These costs would presumably be higher than under option 2 as no national adaptation would be possible. For example, considering that market stakeholders estimated potential one-off costs to adapt IT systems to meet the new EU level transparency requirements would range between zero and €500,000[103], it is likely that under option 3 costs would be at the upper end of the range.

One-off direct costs for setting up a covered bond programme are then expected to converge towards the upper bound of the range provided in the benchmark of €1.8 million. It could be estimated that countries with lower direct one-off costs will move in the direction of high-cost countries as under option 3 there will be convergence towards the strongest credit characteristics of the most developed and high-cost markets. At the same time, high-costs jurisdictions are not expected to decrease their one-off costs.

Recurring direct costs are expected to converge towards the range of between €300,000 and €475,000 per jurisdiction. They might result from increased audit and management fees, payment of a fee to a cover pool monitor which did not exist before, other supervisory and regulatory new costs. These costs would presumably be higher wherever these features are not currently envisaged. Similar examples hold as for option 2. Similar considerations as under option 2 are also valid for the case of Spain.

While costs are expected to sensibly increase for issuers under option 3, the same does not apply to investors. The credit enhancing features of rules foreseen under option 3 would, on the contrary, lower due diligence costs for investors and turn into a benefit for them.

For labelling costs, similar considerations hold as for option 2.

Enforcement costs

Supervisory costs would increase compared to the baseline especially for those Member States where supervision is currently following a light touch approach. Adapting the current supervisory system to the enhanced duties and powers that the new regulation would envisage

[103] ICF, 2017, p.127 based on a survey of 67 stakeholders (mainly issuers) carried out in February 2017.

for supervisors under option 3, would imply higher costs for light touch jurisdictions which would reach the benchmark. Similar considerations and examples hold as for option 2. However, some additional costs would arise under option 3 compared to option 2. First of all, a major effort in terms of issuance of level 2 legislation by EU bodies would be needed to allow a new detailed framework be fully up and running across the EU. Secondly, under this option a centralized supervision under the SSM could be envisaged for the largest banks issuing covered bonds in the euro area. The shift of supervision from national authorities to the SSM would imply adaptation and organizational costs. Resulting costs would be borne both by the SSM and the national authorities. For labelling costs, similar considerations hold as for option 2. Overall, enforcement costs are expected to fully hit the benchmark.

Indirect costs

Introducing or amending covered bond legislation could have indirect costs for unsecured creditors. This type of impact can be considered under two different angles: the legal and the economic one. Under both perspectives, similar considerations hold as for option 2, including the estimates of asset encumbrance.

Option 3 would also present further indirect costs in terms of disruption of well- functioning existing national markets. The one-size-fits-all approach implicit in option 3 could indeed hamper the functioning of several EU jurisdictions and could potentially undermine well-functioning national regimes and markets. In countries where covered bond markets play a fundamental role in the respective economies, disruption in covered bond markets could potentially hamper the overall economy and financial stability of those countries. Quantifying the costs of such a disruption is not possible with the data available.

5.4.3. Overall assessment

Effectiveness, efficiency, coherence

On the whole, this option would achieve the objectives of the initiative. A new covered bond regime along the lines of this option would constitute an integrated and coherent framework for covered bond markets compared to the status quo. As this framework would include detailed proposals for every aspect of covered bond operations, there is no risk that Member States might not implement uniformly the rules defined in EU law. However, detailed harmonisation could have unintended negative consequences, especially for well-functioning markets, neutralising possible benefits. This option would be less efficient than option 2 as transition costs would be higher and it would risk damaging those markets already working well, with unpredictable and difficult to estimate consequences. While benefits might turn out to be higher in the long term, the costs in the short to medium term would be disproportionately high. Therefore, whereas the option would guarantee effectiveness and coherence, it would do so at high costs.

Winners and losers

On the basis of the above, table 8 summarises the benefits and costs of option 3 for each category of stakeholders. Issuers would benefit from a lowering of funding costs and citizens would enjoy in their turn some lower borrowing costs as well. Investors would benefit from a stronger regime, while supervisors would suffer from losing some of their competences in favour of the ECB. Costs would increase for issuers and supervisors up to the maximum extent of the benchmark, while they would decrease for investors. Overall, costs would increase for citizens because of the risk of disruption of well-functioning markets.

Table 8 – Impacts on different stakeholders of Option 3

	Issuers	Investors	Supervisors	Citizens
Benefits	↑↑	↑↑	↓	↑↑
Costs	↑↑	↓	↑↑	↑↑

Stakeholder views

A large majority of stakeholders have suggested discarding this option. Among them institutional stakeholders, supervisors, Member States and industry stakeholders. The EBA and the Parliament discarded this option as well. The totality of Member States opposes it, in particular Member States with well-established markets. All the largest markets indeed oppose this option (DE, DK, FR, ES, SE, IT).

According to a survey conducted by ICF in February 2017 on a sample of 65 stakeholders (mainly issuers)[104], 88 per cent of the respondents think that the main risk of introducing a covered bond framework at EU level would be the disruption of well-functioning national regimes and markets.

5.5. Option 4 – 29th parallel regime

2. This option would be similar to option 3 with the difference that instead of substituting the current 28 regimes with a new one as envisaged in option 3, the newly created regime would operate in parallel and compete with the existing 28 ones, becoming the 29th regime. Differently from option 3, the new regime, if successful, could be expected to gradually replace the existing ones instead of directly superseding them from the outset. This replacement would happen on the basis of voluntary adoption by actors in the market. Two sub-options should be assessed[105]. **Sub-option 4.1**: the system is neutral with no specific incentives for issuers/investors to embrace the 29th regime. Even if very well crafted in compliance with all the EBA best practices, there is no reason to expect this regime will take off in well established markets which will likely continue using their current systems and labels. Smaller countries without large and well-established markets would instead likely adopt the new regime. **Sub-option 4.2**: to make the 29th regime attractive relative to established instruments, another option is to grant it a more favourable preferential prudential treatment. This has also been recognized by respondents to the public consultation. However, given that further strengthening the preferential regime of certain covered bonds would not be politically acceptable, granting more favourable prudential treatment to the 29th regime effectively means repealing or reducing the preferential treatment of the existing regimes.

5.5.1. Benefits

Direct benefits

GO1 - Specific objective 1: as this option would entail a regulation to define covered bonds rather than a directive, it would be directly applicable to all Member States without having to wait for them implementing the directive and without bearing monitoring and implementation costs. Any risk of non-compliance with the directive would be eliminated. The full benchmark

[104] ICF, 2017, pp. 52-54.

[105] Estimated benefits and costs are normally to be intended for the general option, unless otherwise specified.

benefit in terms of number of countries with a covered bond framework in place would be achieved immediately at the entering into force of the regulation. However, differently than under option 3, Member States would be allowed to retain existing national systems. It is reasonable to expect that also under option 4, once a compelling regulation is in place across the EU, this would stimulate the development of covered bond markets, especially in countries where currently they do not yet exist (see option 2). The benchmark in terms of additional amount of covered bond issuance is expected to be only partially achieved if no incentives are put in place as under sub-option 4.1 (25% of the benchmark). The main impact in terms of increased issuance would likely be felt on less developed markets. Increasing the share of covered bond issuance would help banks to lower the cost of their funding. However, the benchmark would only be partially achieved (25% of the benchmark). Under sub-option 4.2, incentives in terms of more favourable preferential prudential treatment would be used to maximize the take up of the new regime. This could help achieving a higher share of the benchmark (50%) both in terms of issuance and related savings. However, this would come at high costs of disruption of the existing markets.

Expanding the scope of covered bond markets is not only to be intended from the geographical perspective, but also in terms of issuers' characteristics. The new regulation would introduce measures to allow the use of pooled covered bond structures and encourage the issuance by smaller banks.

GO1 - Specific objective 2: investor base diversification in line with the benchmark of 60% would not be achieved. What can be achieved is the 50% of the baseline due to the consequence of the tapering of the ECB purchasing programme. However, additional benefits deriving from a unified market would not materialize as the market would likely remain fragmented under this option. Well-established markets are indeed expected to retain their current systems and those would co-exist with the 29th regime, especially under sub-option 4.1. Under sub-option 4.2, the disruption in the banking sector due to the repealing or reduction of the preferential prudential treatment could favour investor diversification away from banks. However, it would come at high costs of disruption among investing banks. Some additional benefit can be expected compared to the baseline only under sub-option 4.2.

GO1 - Specific objective 3: introducing a 29th regime would not address the problem of market fragmentation. The benchmark benefit is not expected to be achieved.

GO1 - Specific objective 4: introducing a 29th regime would not address the problem of market fragmentation and this may not help attracting third country investments. Under sub-option 4.2, the new regime could be expected to be successful in taking off and in becoming the EU standard for third country investors at least in the long term. Whether this option would allow achieving the intended benefits depends crucially on the degree of adoption by industry stakeholders which could be estimated low on the basis of the public consultation feedback. Overall, the benchmark benefit of 16.5% is not expected to be achieved.

GO2 - Specific objective 1: under option 4 a regulation instead of a directive would define covered bond characteristics. There would be no discretionary space for Member States to interpret and implement norms to suit their specificities and this would better guarantee full coherence between covered bonds structural characteristics and their preferential prudential treatment at EU level. However, under sub-option 4.1, prudential concerns for the existing regimes would not be addressed. Only under sub-option 4.2, prudential concerns would be addressed. However, this would be costly and would provoke market turmoil. Costs related to the potential loss of preferential treatment would arise (see option 1). All those costs are likely

to offset any potential benefit deriving from this sub-option. The benefits of comprehensive harmonization under both sub-options would therefore not be achieved.

GO2 - Specific objective 2: eligibility conditions for CRR preferential treatment would be strengthened in a way similar to options 2 and 3. While this would solve the issue of the adequacy of art 129 capital treatment under sub-option 4.1, under sub-option 4.2 the change to the CRR would exclusively concern the 29th regime. This would significantly diminish its importance. It would also be costly and disruptive and would provoke turmoil in existing markets. Costs related to the potential loss of preferential treatment would arise (see option 1). Benefits of strengthening the capital preferential treatment would therefore only partially be achieved under sub-option 4.2.

GO2 - Specific objective 3: rules would be introduced to define principles that must be respected in order for a soft bullet/CPT covered bond to be recognized compliant with the European definition of covered bond in the regulation. This would guarantee coherence between the new features and the preferential treatment granted to all covered bonds, including soft bullets and CPT. In addition, as the extendible maturity structures (soft bullets and CPT) affect the extent of liquidity risk, the regulation would define strict rules for how to manage the interaction between liquidity buffers and extendible structures instead of leaving this choice to Member States in order to keep risks under control. However, those rules will be applicable only to those covered bonds issued under the 29th regime. Covered bonds outside the 29th regime would stay under current rules and maybe follow market based standards (see baseline). If the latter would not be aligned with the EU rules under the 29th regime, this could create confusion in the markets and could translate into higher costs both for issuers and for investors. Benefits would therefore only partially be achieved.

Indirect benefits

In terms of overall savings in funding costs for the real economy, the benchmark of between €1.5 bn and €1.9 is expected to be achieved only partially under this scenario (between 25% and 50% of the maximum benefit).

While in terms of pro-cyclicality a similar approach would be followed under option 4 as under options 2 and 3, it is not clear the relevance this might have in financial markets. Whether those effects matter at all would depend on the size of the market based on the 29th regime which on its turn depends on the degree of adoption by industry stakeholders. The latter could be estimated low on the basis of the public consultation feedback.

5.5.2. Costs

Direct costs

The introduction of a 29th regime would increase complexity as issuers would have to cope with the administrative costs of dealing with an additional regime. These costs would be both one-off (changing legal documentation, amending IT systems, requiring additional legal advice) and recurrent (increased audit and management fees, payment of a fee to a cover pool monitor, other supervisory and regulatory costs). In terms of one-off and transition costs, they would be similar to option 3. One-off direct costs for setting up a covered bond programme could therefore be expected to move towards the upper bound of the range provided in the benchmark of €1.8 million. Recurrent costs are expected to fully hit the benchmark of between €300,000 and €475,000.

Under sub-option 4.1, the likely fragmentation of the market into several regimes including the 29th would likely cause duplication of costs for those issuers choosing to manage more than one regime at the same time. Under sub-option 4.2, it is more likely that systems converge; however this would happen only in the long-term and at high costs as current regimes and well-established national markets would be disrupted.

For labelling costs, similar considerations hold as for options 2 and 3.

An increase in costs compared to the baseline would also be expected for investors, as in their due diligence processes instead of simplifying and saving costs, they would have to deal with an additional regime implying higher complexity, lower transparency and higher costs (this especially holds under sub-option 4.1).

Enforcement costs

The introduction of a 29th regime would place a further burden on supervisors as they would have to deal with an additional regime. This would be the case under sub-option 4.1, while under sub-option 4.2 the convergence to a single harmonised regime could take place in the long term. In both cases, the transition would imply higher complexity and higher costs for supervisors as they would not only have to adapt the current supervisory system to the enhanced duties and powers that the new regulation would envisage similarly to what happens under option 3. They would also have to supervise an additional regime subject to a different set of rules. This could risk duplicating supervisory costs. In addition, a major effort in terms of issuance of level 2 legislation by EU bodies would be needed under option 4 to allow a new detailed framework be fully up and running across the EU. Finally, under this option a centralized supervision under the SSM could be envisaged for the largest banks issuing covered bonds in the euro area. The shift of supervision from national authorities to the SSM would imply adaptation and organizational costs. For labelling costs, similar considerations hold as for options 2 and 3. Overall, the benchmark for enforcement costs is expected to be fully hit.

Indirect costs

Introducing or amending covered bond legislation could have indirect costs for unsecured creditors. This type of impact can be considered under two different angles: the legal and the economic one. Under both perspectives, similar considerations hold as for options 2 and 3. However, it is not clear the relevance this might have in financial markets. Whether those effects matter at all would depend on the size of the market based on the 29th regime which on its turn depends on the degree of adoption by industry stakeholders. The latter could be estimated low on the basis of the public consultation feedback.

5.5.3. Overall assessment

Effectiveness, efficiency, coherence

While a new covered bond regime along the lines of this option would constitute an integrated and coherent framework for covered bond markets and would offer a comprehensive regulatory framework to issuers wanting to use an EU label, this option would entail either low effectiveness or high costs depending on which sub-option is chosen. Under sub-option 4.1, a limited market take-up is expected, differentiated according to whether covered bond markets are already in place (low) or not (high). Therefore its effectiveness in accomplishing stated objectives would be undermined. Under sub-option 4.2, the take up could be

maximized; however, this would come at the cost of disruption of the existing markets. Option 4 would increase fragmentation and related costs especially under sub-option 4.1, resulting in this option being less efficient. Overall the option would not guarantee the achievement of the objectives of the review in an effective, efficient and coherent way. While for other EU initiatives a 29th regime could be considered the optimal solution, in this case the final objective is the convergence to a single harmonized framework, differently than for example in the PEPP initiative. Ending up with different frameworks or converging on a single one only in the long term and at high costs in terms of disruption, would not be an effective and efficient way to achieve the specific objectives of this initiative and to match its level of policy ambition.

Winners and losers

On the basis of the above, table 9 summarises the benefits and costs of option 4 for each category of stakeholders. Issuers would benefit from a lowering of funding costs and citizens would enjoy in their turn some lower borrowing costs as well. Investors would benefit from a stronger regime only if they invest in covered bonds issued under the 29th regime, while supervisors would suffer from losing some of their competences in favour of the ECB and for having to monitor different regimes. Costs would increase for issuers and supervisors up to the maximum extent of the benchmark as the regimes under their management/supervision would likely be more than one. Under this option costs would also increase for investors due to complexity in the market following the introduction of a 29th parallel regime. Overall, costs would increase for citizens because of the increased fragmentation under sub-option 4.1 or for costs of disruption of the existing markets under sub-option 4.2.

Table 9 – Impacts on different stakeholders of Option 4

	Issuers	Investors	Supervisors	Citizens
Benefits	↑	↑	↓	↑
Costs	↑↑	↑	↑↑	↑

Stakeholder views

This option did not find any support amongst stakeholders. Stakeholders from all groups (supervisory authorities, Member States, the EBA, investors, issuers and the ECB) pointed to increased market fragmentation, lower transparency and more uncertainty as a result of introducing a new system in parallel to the existing national systems. Stakeholders also noticed that in order to ensure a high take up incentives would need to be provided in terms of preferential treatment (sub-option 4.2). However, they expressed concerns about disrupting current markets under this sub-option. The EBA did not assess this option in their 2016 report. The Parliament did not consider this option in their report either. Member States expressed their concern with this option in the course of expert groups meetings.

6. COMPARISON OF OPTIONS

Table 10 summarises the extent to which the options are **effective, efficient and coherent**. Effectiveness is mapped against the specific objectives set out in section 3. The respective scores are attributed on the basis of the analysis above.

Table 10 – Summary of options in terms of effectiveness, efficiency and coherence

	Effectiveness		**Efficiency**	**Coherence**	**Score**
	Objective 1 Enhance CMU potential	Objective 2 Coherence of prudential regulation with characteristics of the instrument			
Baseline	0	0	0	0	0
Option 1	+	≈	++	≈	3
Option 2	++	+	++	+	6
Option 3	++	++	- -	++	4
Option 4	++	+	-	+	3

Magnitude of impact as compared with the baseline scenario: ++ strongly positive (score 2); + positive (score 1); – – strongly negative (score -2); – negative (score -1); ≈ marginal/neutral (score 0).

Table 10 shows that option 1 is not effective in terms of meeting the objectives whereas options 2, 3 and 4 do it to a varying extent. At the same time, the table shows that option 2 is expected to achieve the objectives at lesser costs compared to options 3 and 4. As regards coherence, option 3 scores the best but options 2 and 4 are also judged in line with overall policy objectives. In sum, the option which promises the best possible balance across the three criteria of effectiveness, efficiency and coherence is option 2.

Having established how the options score in terms of effectiveness, efficiency and coherence, table 11 also highlights how the options score in terms of the level of **stakeholder support and overall level of regulatory ambition**. The latter could be an indication of the political challenges associated with the option in question.

Table 11 – Summary of pros/cons of options

Option	**Effectiveness/efficiency/coherence**	**Stakeholders support**	**Level of ambition/challenge**
1	Medium (3)	Medium	Low
2	High (6)	High	Medium
3	High (4)	Low	High
4	Medium (3)	Low	Medium

Table 11 shows that options 2 and 3 present the best combination of the criteria of effectiveness, efficiency and coherence underlined by their high scores. At the same time, stakeholders support is high for option 2, medium for option 1, while it is low for options 3 and 4. Options 2, 3 and 4 are rated to be more ambitious.

6.1.1. Retained option

In light of the above, the retained option is **option 2: minimum harmonization based on national regimes**. It achieves most of the objectives of the initiative at reasonable costs. It furthermore appropriately balances the degree of flexibility necessary to accommodate Member States features with the uniformity that is necessary for achieving coherence at EU level. It is likely to be the most effective in achieving the objectives, while at the same time being efficient, minimising disruption and transition costs. Of the options considered, it is also, among the most ambitious options in regulatory terms, while, at the same time, being the course of action that enjoys the highest support by stakeholders. All of them: institutional stakeholders, supervisors, Member States and industry support this option. The EBA, the ECB, the Parliament, national and European supervisors have advocated for this option. This is the option that fits with the EBA Report and the EP Report. A majority of Member States is also favourable to this option. Among them, all the largest markets. The ECBC (representing almost all issuers in the market and investors) is also in favour of this option.

3. Annex 6 describes the detailed provisions under the retained option, specifying for each of them whether and how they deviate from the EBA 2016 Report and how they differ from the current situation in Member States where a legal covered bond framework is in place. The last column in the table in Annex 6 summarizes the potential impacts on Member States of the detailed provisions under the retained option.

7. OTHER SPECIFIC IMPACTS OF THE RETAINED POLICY OPTION

7.1. Impacts on SMEs

The policy option chosen would have some direct and indirect positive effects on SME financing. Direct benefits stem from the fact that covered bonds sometimes directly finance commercial and residential mortgages which are often related to SME activities. Entrepreneurs can use their residential property as collateral for financing their professional activity; commercial mortgages finance business facilities (offices, productive capacity and shopping malls, etc.); public sector loans finance local infrastructure (like schools, hospitals etc.) and possibly guarantee SME loans.

However, the most significant benefit on SMEs would come from the initiative on European Secured Note (ESN) which, as explained at the forefront of this impact assessment, is a parallel separate initiative.

7.2. Social impacts

The main social impacts of the retained option would be on the housing and real estate markets. As shown in section 2.1.1, covered bonds are an important tool for financing mortgages. Mortgages (around €7 trillion in 2015) represent 16% of total assets in the EU banking sector (€43.3 trillion) and 30% of the total loans provided by EU banks (€23.5 trillion in 2015). In terms of share of residential lending, covered bonds finance an average of 30% of residential mortgages lending in the EU in 2015 (see section 2.1.1.). Fostering covered bond markets would contribute to lower interest rates on mortgages (see benchmark for indirect benefits).

7.3. Environmental impacts

Covered bonds contribute to finance lending and hence increase demand for commercial and residential real estate. This contributes to increasing the supply of real estate, which has an effect on the environment. To mitigate environmental concerns, the European Mortgage Federation/ECBC has launched an "Energy Efficient Mortgage Initiative" to support energy efficiency improvements in buildings. The aim of the initiative is to explore ways to mobilise private mortgage financing to boost energy efficient building renovation in Europe.

In the EU, buildings are responsible for 40% of total energy consumption and 36% of CO2 emissions. About 35% of the EU's buildings are over 50 years old and 75-90% of the building stock is predicted to remain standing in 2050, making energy efficient renovation a top priority for Europe. By improving the energy efficiency of buildings alone, the EU's total energy consumption could be reduced by 5-6% and CO2 emissions by 5%. The scale of the investment needed is estimated at around €100 billion per year.

European mortgage and covered bond industries could play a role in the financing of those investments in energy efficiency. The idea is to incentivise homeowners to move their properties out of the 'brown' zone (e.g. energy rating E-G) into the 'green' zone (e.g. energy rating A-D) by way of preferential interest rates or additional funds at the time of origination of the mortgage. Mortgages as an existing financial product are indeed familiar to consumers in Europe, and are offered at an important moment in the building lifecycle in terms of the opportunity to renovate real estate. An appropriate mortgage instrument could therefore contribute to increasing the current rate of energy efficient building renovation. The initiative is only recently developing, but it could become material over the medium term with significant environmental impacts in terms of energy efficiency.

EU action by means of minimum harmonisation of covered bonds could lend support to those efforts by further developing covered bond markets.

8. MONITORING AND EVALUATION

No sooner than five years after the date of transposition of the Directive, the Commission shall carry out an evaluation of this legislative package (consisting of a regulation and of a directive) and present a Report on the main findings to the European Parliament, the Council and the European Economic and Social Committee. The evaluation shall be conducted according to the Commission's better regulation Guidelines.
Member States shall provide the Commission with the information necessary for the preparation of that Report.

Member States shall regularly monitor the application of this legislative package based on the following non-exhaustive list of indicators, which correspond to the benchmark benefits and costs as defined in section 5.1 and exemplified in table 12.

Table 12 – Benchmark benefits/costs and related monitoring indicators

Objective	Benchmark benefits	Monitoring indicators
General Objective 1 **Enhance CMU potential**		
Specific objective 1: develop covered bond markets in all EU countries	a) Number of countries adopting a framework b) Additional issuance	1) Number of MS adopting a CB framework 2) Yearly issuance of CBs in MS 3) Funding sources of European

	c) Savings of funding costs for banks d) Overall savings in borrowing for the real economy	banks and related costs
Specific objective 2: diversify investor base	e) Diversification of the investor base	4) Investors by type
Specific objective 3: tap potential for more cross border investments	f) Percentage of cross-border investments	5) Percentage of cross-border investments 6) Investors by geography
Specific objective 4: attract investors from outside the EU	g) Percentage of covered bonds held outside the EU	7) Percentage of covered bonds held outside the EU 8) Inward-outward investments from/to third countries
General Objective 2 **Coherence of EU prudential regulation**		
Specific objective 1: align the structural characteristics of covered bonds across the EU	No measurable benefit	9) CB enjoying LCR preferential treatment 10) CB enjoying Solvency II preferential treatment 11) Treatment of covered bonds in case of resolution 12) Covered bonds in defaults
Specific objective 2: strengthen the requirements for capital preferential treatment in CRR	No measurable benefit	13) Issuance of 129 CRR compliant covered bonds
Specific objective 3: define a framework for soft bullets/CPTs	No measurable benefit	14) Share of soft bullet/CPT issuance 15) Extensions of maturities for soft bullets/CPT
	Benchmark costs	**Monitoring indicators**
	Direct administrative costs	16) Licensing fees 17) Cover pool monitor costs 18) Supervisory and regulatory fees 19) Grandfathering
	Enforcement costs	20) Supervisory costs
	Indirect costs	21) Level of asset encumbrance

Member States shall organise the production and gathering of the data necessary to measure the change in the indicators described in table 12 above, and shall supply that information to the Commission on a yearly basis.

In particular, concerning the first indicator, the Commission will be in charge of monitoring the implementation of the directive according to EU law. Indicators 2, 4, 5, 6, 7 and 8 are to be collected through the help of market associations such as the ECBC. Indicators from 9 to 15 and indicator 20 require the involvement of supervisors. Surveys among Member States' competent authorities will be used for this purpose. Indicators from 16 to 19 are to be provided both by supervisors and market associations. Surveys among Member States' competent authorities will be used for this purpose. However, indicator 17 will need the involvement of the industry, depending on the model of cover pool monitor adopted. Finally, concerning indicators 3 and 21, they are currently monitored by the EBA which reports periodically on them.

REFERENCES

Banerjee A., V. Bystrov and P. D. Mizen (2013), "How Do Anticipated Changes to Short-Term Market Rates Influence Banks' Retail Interest Rates? Evidence from the Four Major Euro Area Economies", in Journal of Money, Credit and Banking, Vol. 45, 1375-1414.

Birchler U.W. (2000), "Bankruptcy Priority for Bank Deposits: A Contract Theoretic Explanation", in Review of Financial Studies, Vol. 13, Issue 3, pp. 813–840.

Borio C., and W. Fritz (1995), "The Response of Short-Term Bank Lending Rates to Policy Rates: a Cross Country Perspective." BIS Working Paper No. 27.

Chemla G. and C. Hennesy (2014), "Skin in the Game and Moral Hazard", in The journal of Finance, Vol. 69, Issue 4, pp. 1597–1641.

Darracq-Paries M., Moccero N., Krylova E. and C.Marchini (2014), "The retail bank interest rate pass through: the case of the Euro Area during the financial and sovereign debt crisis", ECB Occasional Paper Series 155, September.

De Bondt G. (2002), "Retail bank pass through: new evidence at the Euro Area level", ECB Working Paper 136.

De Graeve F., O. De Jonghe and R.V. Vennet (2007), "Competition, Transmission and Bank Pricing Policies: Evidence From Belgian Loan and Deposit Markets", in Journal of Banking and Finance, Vol 31, pp. 259-278.

Deutsche Bundesbank (2016), "Asset encumbrance, bank funding and financial fragility", https://www.bundesbank.de/Redaktion/EN/Downloads/Publications/Discussion_Paper_1/2016/2016_06_13_dkp_17.pdf?__blob=publicationFile

EBA (2017a), "Report on asset encumbrance", https://www.eba.europa.eu/documents/10180/1720738/EBA+Report+on+Asset+Encumbrance+-+July+2017.pdf

EBA (2017b) "Report on Funding plans", https://www.eba.europa.eu/documents/10180/1720738/Report+on+Funding+Plans+-+July+2017.pdf)

EBA (2016), "Report on covered bonds - Recommendations on Harmonisation of Covered Bond Frameworks in the EU", EBA-Op-2016-23, 20 December 2016: https://www.eba.europa.eu/documents/10180/1699643/EBA+Report+on+Covered+Bonds+%28EBA-Op-2016-23%29.pdf

EBA (2014), "Report on EU covered bond frameworks and capital treatment", July 2014: https://www.eba.europa.eu/-/eba-supports-capital-treatment-of-covered-bonds-but-calls-for-additional-eligibility-criteria

EBRD (2017), "Pan Baltic Covered Bond Structure - First Draft of the Proposal", 11 September 2017.

ECBC (2013), "Position Paper on asset encumbrance", June 2013

EMF and ECBC (2017), "Market Insights & Updates", February 2017.

ESRB (2012), "Recommendation on funding of credit institutions" (ESRB/2012/2, Rec. E), December 2012: https://www.esrb.europa.eu/pub/pdf/recommendations/2012/ESRB_2012_2.en.pdf?8de3922e86b0f4863bc6e748f1f1a4c0

European Commission (2017a). Communication on the Mid-term Review of the Capital Markets Union (CMU) Action Plan, COM (2017) 292 final, 08.06.2017.

European Commission (2017b). "State of the Union 2017: Letter of Intent to President Antonio Tajani and to Prime Minister Juri Ratas":

https://ec.europa.eu/commission/sites/beta-political/files/letter-of-intent-2017_en.pdf

European Parliament (2017), Bernd Lucke (A8-0235/2017) "Towards a pan-European covered bonds framework", approved 4th July 2017.

Gambacorta L. (2008), "How Do Banks Set Interest Rates?" in European Economic Review, Vol. 52, pp. 792-819.

Hofmann B. and P.D. Mizen (2004), "Interest Rate Pass Through in the Monetary Transmission Mechanism: Evidence from Individual Financial Institutions Retail Rates", in Economica, Vol 71, pp. 99-125.

ICF (2017), "Covered Bonds in the European Union: harmonisation of legal frameworks and market behaviours", Study for the European Commission, May 2017.

Illes A., Lombardi M. and P. Mizen (2015), "Why did bank lending rates diverge from policy rates after the financial crisis?", BIS Working Papers No 486, February.

IMF, (2013), "Changes in bank funding patterns and financial stability risks", Global Financial Stability Report, Ch 3, October 2013.

Kwapil C. and J. Scharler (2010), "Interest Rate Pass-Through, Monetary Policy Rules and Macroeconomic Stability", Journal of International Money and Finance, Vol 29, pp. 236-51.

Van Rixtel A. and G. Gasperini (2013), "Financial crises and bank funding: Recent experience in the euro area", BIS Working Paper 406.

ANNEX 1 - PROCEDURAL INFORMATION

I. Lead dg, decide planning / cwp references

This Impact Assessment Report was prepared by Directorate D "Regulation and prudential supervision of financial institutions" of the Directorate General "Directorate-General for Financial Stability, Financial Services and Capital Markets Union" (DG FISMA).

The Decide Planning reference of the "Initiative on the integrated covered bond framework" is PLAN/2015/030.

The initiative on the harmonisation of the covered bond market was included in the Mid-Term Review of the Capital Markets Union Action Plan from 08.06.2017.

II. Organisation and timing

Several services of the Commission with an interest in the assessment of the initiative have been associated in the development of this analysis.

Three Inter-Service Steering Group (ISSG) meetings, consisting of representatives from various Directorates-General of the Commission, were held in 2017.

The first meeting took place on 14 June 2017, attended by DG ECFIN, COMP, GROW, JUST, TRADE and the Secretariat General (SG).

The second meeting was held on 18 July 2017. The representatives from DG ECFIN, JUST, GROW and the Secretariat General (SG) were present.

The third meeting was held on 28 September 2017 and was attended by DG GROW and SG. This was the last meeting of the ISSG before the submission to the Regulatory Scrutiny Board on 6 October 2017.

The meetings were chaired by SG.

DG FISMA has updated the Impact Assessment Report by taking into account the comments made by SG, ECFIN, JUST and GROW. In particular, the following changes were made:

- The labelling system of the covered bonds was clarified, taking into account the discussions on the securitisation proposal, in particular the options of standalone labelling, third party verification or public confirmation.
- The absence of changes to the Solvency II framework was explained.
- The end of the ECB purchasing programme, and its consequences, were removed from the problem definition but left rather as an element of the context.
- CMU dimensions in the problem definition were broadened and clarified
- As regards the options further explanations on the eligibility of the assets under the option to develop a principle-based legislation have been included.
- The link of the initiative with the European Secured Notes has been clarified;
- Specific comments provided by DG ECFIN have been integrated in the document;

- The new updated models of the Annexes provided in the revised toolbox https://myintracomm.ec.europa.eu/sg/better_regulation/Documents/tool_42.pdf have been used.

III. Exceptions to the better regulation guidelines

No exception from the Better Regulation Guidelines has been identified by DG FISMA.

IV. Consultation of the regulatory scrutiny board (rsb)

The Impact Assessment report was examined by the Regulatory Scrutiny Board on XX XXXX, 2017. The Board gave a XXXX opinion and …

V. Evidence, sources and quality

The impact assessment has been carried out with the comprehensive qualitative and quantitative evidence from various recognised sources, including the two reports by the European Banking Authority (EBA) and by taking account the findings of the commissioned study to an external consultant. The source of the analysis also included a targeted public consultation with stakeholders.

The European Parliament's Own Initiative Report "Towards a pan-European covered bonds framework" has also been taken into account.

In terms of milestones, in a response to the ESRB recommendation from 2012 on the preferential capital treatment of covered bonds, the EBA issued a 'Report on EU covered bond frameworks and capital treatment' in 1 July 2014, identifying best practices with a view to ensuring robust and consistent frameworks for covered bonds across the EU. The report was made in close cooperation with the national competent authorities in the Subgroup on Securitisation & Covered Bonds. As a follow-up to the identification of best practices, the ESRB recommended to the EBA to monitor the functioning of the market for covered bonds by reference to these best practices for a period of 2 years.

On 20 December 2016 the EBA delivered "Report on covered bonds - Recommendations on harmonisation of covered bond frameworks in the EU" to the ESRB and to the Council and the Commission containing an assessment of the functioning of the market for covered bonds under the best practice principles. This report was also made in the Subgroup on Securitisation and Covered Bonds.

The report concluded that due to the confirmed existing diversity in national covered bond frameworks, significant market and regulatory developments with direct impact on covered bonds, and the overall importance of covered bonds for the funding of the EU economy, further harmonisation would be necessary in ensuring more consistency in terms of definition and regulatory treatment of covered bonds in the European Union. The report further concluded that harmonisation should build on the well-functioning markets already existing in some Member States.

The EBA report announced its proposal for a three-step approach to the harmonisation of covered bond frameworks in the EU focussing on: (i) the development of a covered bond framework with the introduction of a new covered bond directive (Step 1); (ii) amendments to the Capital Requirements Regulation (CRR) relating to the preferential risk-weight treatment (Step 2); and (iii) voluntary convergence (Step 3).

These three steps to harmonisation were proposed after the European Commission concluded the analysis of the responses received to the public consultation that was published in September 2015 and was aimed to assess the convenience of a possible future integrated European covered bond framework that could help improve funding conditions throughout the Union and facilitate cross-border investment and issuance in Member States.

In August 2016 the European Commission commissioned a detailed study to an external consultant ICF on this proposal, assessing the potential costs and benefits of moving ahead with a legislative framework for the covered bonds. The Report was based on the following sources:

- A review and synthesis of relevant reports produced by the European Banking Authority (EBA), the European Central Bank (ECB), the European Covered Bonds Council (ECBC) and relevant academic and grey material.
- Quantitative and qualitative analysis of the responses received to the public consultation.
- Analysis of descriptive statistics compiled from a variety of sources including, published information from rating agencies, issuers and investment banks, unpublished analysis from rating agencies, issuers, issuer associations, and investment banks, the ECBC 2016 Factbook, the ECBC comparative database, the covered bond label website, the covered bond investor council website, and primary and secondary laws in Member State.
- Stakeholder interviews covering issuers, investors, supervisors/regulators, industry bodies and rating agencies.
- An online survey of issuers and national coordinators that received 61 responses.

The report 'Covered Bonds in the European Union: Harmonisation of legal frameworks and market behaviours' was published in May 2017.

The quality of the studies can be considered high as they represent the currently best available information on the covered bonds markets developments and include quantitative and qualitative input from all the identified stakeholders.

ANNEX 2 – SYNOPIS REPORT ON STAKEHOLDER CONSULTATIONS

I. Overview of consultation activities

1. ESRB Recommendation on the funding of credit institutions in December 2012;
2. First EBA Report on EU Covered Bonds in July 2014;
3. The Commission's open Public Consultation which ran between 30 September 2015 and 06 January 2016, followed by a conference in February 2016 organized by DG FISMA;
4. Public hearing held by the EBA in November 2016 before publishing the EBA report "Report on covered bonds - Recommendations on harmonisation of covered bond frameworks in the EU" in December 2016;
5. Publication of the ICF study 'Covered Bonds in the European Union: Harmonisation of legal frameworks and market behaviours' based on stakeholder interviews and an online survey, in May 2017;
6. Inception Impact Assessment on Covered Bonds published in June 2017;
7. In July 2017 the European Parliament approves its own-initiative Report on covered bonds;
8. Further stakeholder consultations, including meeting with Expert Group on Banking, Payments and Insurance in June and September 2017.

II. Stakeholder consultations

The Commission held an open Public Consultation to assess the convenience of a possible future integrated European covered bond framework. The Consultation Paper was meant to trigger a debate with stakeholders on the feasibility and potential merits of greater integration between covered bond laws.

The *consultation objective* was to examine what weaknesses and vulnerabilities covered bond markets exhibited during the financial crisis and, against that backdrop, open a debate with all interested parties on the merits of targeted actions that could be taken to help improve funding conditions on the back of these instruments. This would be especially important where issuance faces legal or practical difficulties and where there are obstacles to cross-border investment flows within the Union and from third countries. The consultation is part of the Capital Markets Union project.

The consultation was open to the public, but mainly received responses from the *key stakeholder groups* concerned with covered bonds:

- *Covered bond issuers* are credit institutions issuing covered bonds, either as their main business activity or as part of their general credit institution business. It should be noted that covered bonds issuers are often also covered bond investors as the issuers are credit institutions subject to requirements of liquidity coverage and capital.
- *Covered bond investors* are often institutional investors, dominated by banks and central banks, but asset managers, insurance companies and pension funds also play a significant role. Retail investors are represented indirectly by providing funds to pension funds and asset managers that then invest in covered bonds on their behalf.

- As the special public supervision is considered to be one of the main structural features of covered bonds, the *national competent authorities supervising the covered bond issuers* are important stakeholders. Since there are large differences in the national covered bond frameworks, harmonisation could imply quite extensive regulatory work in some Member States, meaning that the *national governments* also have strong views in the harmonisation discussion.
- As covered bonds are all subject to external rating, the input from *the rating agencies* on their assessment of the different programmes and issuances is very relevant for further work on harmonisation. This especially regards transparency of the cover pool, liquidity risk mitigation and minimum overcollateralisation as these elements are considered important structural features of covered bonds and are regularly assessed by the rating agencies.

1. European Systemic Risk Board (ESRB) recommendation on funding of credit institutions-2012

The ESRB recommendation on funding of credit institutions of 20 December 2012[106] recommended national supervisory authorities to incentivise the implementation of best practices regarding covered bonds, and the EBA to coordinate such initiatives and to identify best practices as well as to consider the functioning of the marketplace in accordance with the principles identified. The recommendation also called for the EBA to consider if appropriate to refer the matter to the European Commission for potential further action.

2. European Banking Authority (EBA) "Report on EU covered bond frameworks and capital treatment" 1st July 2014

Article 503(1) of Regulation (EU) No 575/2013 provides that the EBA shall be consulted by the Commission on whether the risk weights laid down in Article 129 of that Regulation are adequate for all the instruments that qualify for these treatments, whether the criteria in Article 129 of that Regulation are appropriate and whether loans secured by aircrafts (aircraft liens) and residential loans secured by a guarantee but not secured by a registered mortgage, should under certain conditions be considered an eligible asset. The Commission issued a call for advice accordingly and the EBA issued opinion on the preferential capital treatment of covered bonds recommending a further convergence of national legal/regulatory and supervisory covered bond frameworks, so as to further support the existence of a single preferential risk weight treatment to covered bonds in the EU.

In a response to the ESRB recommendation and the Call for advice from the Commission, the EBA issued a 'Report on EU covered bond frameworks and capital treatment' on 1st July 2014[107], identifying best practices. The report included the opinion of the European Banking

[106] ESRB recommendation on funding of credit institutions (ESRB/2012/2, Recommendation E), December 2012 (ESRB/2012/2):

https://www.esrb.europa.eu/pub/pdf/recommendations/2012/ESRB_2012_2.en.pdf?8de3922e86b0f4863bc6e748f1f1a4c0

[107] EBA report on EU covered bond frameworks and capital treatment, July 2014:

https://www.eba.europa.eu/-/eba-supports-capital-treatment-of-covered-bonds-but-calls-for-additional-eligibility-criteria

Authority on the preferential capital treatment of covered bonds, also issued in response to the ESRB recommendation and the consultation of the EBA envisaged in Article 503 of the CRR.

The report provided a first comprehensive overview, from the regulatory and supervisory perspective, of the EU (including Iceland and Norway) national covered bond frameworks. It identified a series of best practice recommendations to cover areas not reflected in common EU legislation with a view to ensuring robust and consistent frameworks for covered bonds across the EU.

3. Public consultation on 'Covered Bonds'

On 30 September 2015, the European Commission launched an open public consultation on Covered Bonds in the European Union. The consultation closed on 6 January 2016.

The purpose of the consultation, which is part of the Capital Markets Union Action Plan, was to evaluate weaknesses and vulnerabilities in national covered bond markets as a result of the crisis and to assess the convenience of a possible future integrated European covered bond framework that could help improve funding conditions throughout the Union and facilitate cross-border investment and issuance in Member States currently facing practical or legal challenges in the development of their covered bond markets.

All citizens and organisations were encouraged to contribute to the consultation. Contributions were particularly sought from participants in covered bond markets, the most relevant being investors, issuers and public authorities, but also rating agencies, organisations and other market participants. The list of the main stakeholders targeted in the consultation is provided at the beginning of Section II.

The consultation paper was structured in three parts:

1. Part I - Covered bond markets: economic analysis;

2. Part II - Exploring the case for a more integrated framework;

3. Part III - Elements for an integrated covered bond framework.

The Commission received 76 responses. 19 responses came from the public sector and 57 responses came from the private sector. The private sector responses divided into 27 from issuers, 11 from investors and the remaining 19 from other private sector stakeholders, such as cross-industry and consumer associations, rating agencies, surveyors, service providers and individuals.

Geographic breakdown of responses:

Cross-Europe	2
Austria	3
Belgium[108]	13
Czech Republic	3
Denmark	3

[108] Includes a number of Cross-Europe respondents based in Brussels

Finland	1
France	5
Germany	9
Ireland	1
Italy	3
Luxembourg	2
Norway	1
Poland	4
Slovakia	1
Spain	4
NA	21

Overall, stakeholders agreed that covered bond markets showed increased yield divergence between Member States since 2007. Although stakeholders agreed that a robust legal framework would help to reduce volatility and ease market access in times of distress, they did not generally regard an absence of EU-level harmonisation as the most significant factor causing market fragmentation. Furthermore, even robust legal frameworks cannot fully isolate the covered bond programme from issuer's specific risks, making stakeholders also suggesting disclosure requirements to be substantially increased.

While respondents were concerned that harmonisation based on a one-size-fits-all approach could risk impairing well-functioning markets and reducing flexibility and product offering, at the same time, they showed cautious support for EU targeted action, provided that harmonisation is principles based, build on existing frameworks and respect the unique characteristics of national frameworks.

The public consultation introduced also a comprehensive EU law framework for covered bonds, a so-called 29th regime as a substitute for harmonisation. The rationale behind the 29th regime was to make a framework available for issuers to resort to as an alternative to national laws. This proposal did not find any support amongst stakeholders, all of them pointing to the increased market fragmentation, lower transparency and more uncertainty as a result of introducing a new system to complement the existing national systems. Stakeholders also expressed concerns about the possibility for issuances under the 29th regime to have a sufficient volume without introducing more favourable preferential treatment for issuances under the 29th regime than the existing regimes, thus disrupting the current market.

In relation to market-led initiatives, respondents regard them as valuable but insufficient. For instance, while stakeholders consider the European "Covered Bond Label" as a positive step towards better integration of the covered bond markets, most acknowledge that there are certain limitations to self-regulation: voluntary arrangements cannot form the basis for a specific regulatory treatment so they need to be complemented by sound regulatory treatment, at national or European level. Public authorities in particular noted that a significant weakness of voluntary standards is that it would be up to issuers to comply with them in times of crises.

The summary of the replies on the Open Public Consultation has been published here http://ec.europa.eu/finance/consultations/2015/covered-bonds/index_en.htm

3.1. European Commission Conference on Covered Bonds

The European Commission conference on covered bonds was organized by DG FISMA on 1st February 2016. It included four sessions of panel debates with a short presentation from each of the 15 panellists. The panellists consisted of issuers, investors, supervisors, rating agencies, European Covered Bond Council (ECBC) - a market participant organisation, and capital market professionals.

Every one of the panellists but the ECB was quite cautious about harmonisation, referring to the resilience of covered bonds during the financial crisis, and requesting the Commission not to mend something not broken. The discussion at the conference seemed more doubtful regarding harmonisation than the responses in the public consultation. This may be due to the fact that the national competent authorities and governments were not represented among the panellists which were mainly from the industry.

Some panellists mentioned the 29th regime in their presentation, repeating the concerns expressed by most stakeholders in the public consultation.

4. EBA "Report on covered bonds - Recommendations on harmonisation of covered bond frameworks in the EU" - 20 December 2016

As a follow-up to the identification of best practices, the ESRB recommended to the EBA to monitor the functioning of the market for covered bonds by reference to these best practices for a period of 2 years. On 20 December 2016 the EBA delivered a "Report on covered bonds - Recommendations on harmonisation of covered bond frameworks in the EU"[109] to the ESRB and to the Council and the Commission containing an assessment of the functioning of the market for covered bonds under the best practice principles.

In its Report on covered bonds the EBA proposes a three-step approach towards harmonisation of covered bonds, taking into account that EU covered bond frameworks differ in particular in regard to legal, regulatory, and supervisory issues, while acknowledging that the final framework should build on the strengths of existing national frameworks. This would still leave room for varying national implementation.

Overall, the EBA proposes a three-step approach to harmonisation:

- Step 1 focusses on the structural aspects of a covered bond: Introduction of a harmonised definition of covered bonds, replacing Article 52(4) of the UCITS Directive with a dedicated directive to become the single point of reference of covered bonds for regulatory purposes;
- Step 2 addresses issues related to the preferential capital treatment of covered bonds. This would involve targeted amendments to Article 129 of the Capital Requirement Regulation;
- Step 3 includes voluntary measures at a national level.

Drawing on the EBA recommendations, a potential EU legislative framework for covered bonds could comprise step 1 and 2.

4.1. EBA Public Hearing on the report on covered bonds

[109] EBA report on covered bonds, 20 December 2016: https://www.eba.europa.eu/documents/10180/1699643/EBA+Report+on+Covered+Bonds+%28EBA-Op-2016-23%29.pdf

The EBA held a public hearing in November 2016 before publishing the "Report on covered bonds - Recommendations on harmonisation of covered bond frameworks in the EU". The hearing was based on a presentation of the report which had not yet been published at the time of the hearing.

The discussion at the hearing mainly concerned the more technical aspects of a future harmonisation, especially including the introduction of more costly requirements on liquidity and overcollateralisation, and the use of non-traditional amortisation structures.

The report was not changed materially after the public hearing.

5. Feedback on the Inception Impact Assessment on Covered Bonds

The inception impact assessment on covered bonds was published on 9 June 2017 with a possibility to provide feedback until 7 July 2017.

The Commission received four responses to the inception impact assessment. All of them supported the EU legislative initiative. The low number of respondents is most likely due to the very thorough public consultation ended in January 2016 followed by a well-attended conference 1st February 2016 and ongoing consultations with stakeholders since then, both at bilateral level and in the context of the Expert Group on Banking, Pension and Insurance meeting on 9 June 2017.

The responses for the inception impact assessment came from Intesa Sanpaolo (Italy), Finance Denmark (The Danish organisation of issuers of covered bonds), the French Banking Federation and the Austrian Federal Economic Chamber (the legal representation of the Austrian Banking Industry).

The responses related to specific issues of the national frameworks, the relation with specific requirements e.g. on liquidity, and repeated the general view of not jeopardising the well-functioning national systems, while still supporting harmonisation as such.

6. ICF study 'Covered Bonds in the European Union: Harmonisation of legal frameworks and market behaviours'

European Commission requested in August 2016 a study from a third party contractor ICF on the potential impact on the covered bonds on the market[110]. The study assesses the current market performance and the costs and benefits of potential EU action. On the basis of a literature review; qualitative and quantitative analysis and stakeholder interviews, for a total of 106 organizations consulted in the period between November 2016 and February 2017, the study concluded there was a case for legislative action.

The study was based on:

- A review and synthesis of relevant reports produced by the European Banking Authority (EBA), the European Central Bank (ECB), the European Covered Bonds Council (ECBC) and relevant academic and grey material.

[110] ICF (2017), "Covered Bonds in the European Union: Harmonisation of legal frameworks and market behaviours". Study for the European Commission (May 2017).

- Quantitative and qualitative analysis of the responses received to the public consultation.
- Analysis of descriptive statistics compiled from a variety of sources including, published information from rating agencies, issuers and investment banks, unpublished analysis from rating agencies, issuers, issuer associations, and investment banks, the ECBC 2016 Factbook, the ECBC comparative database, the covered bond label website, the covered bond investor council website, and primary and secondary laws in Member State.
- Stakeholder interviews covering issuers, investors, supervisors/regulators, industry bodies and rating agencies.
- An online survey of issuers and national coordinators that received 61 responses.

The study determined that overall the potential benefits of a legislative framework outweighed any potential costs. The study took into account the EBA report findings. It recommended following the EBA report recommendations in step 1 and step 2.

7. European Parliament own-initiative report on covered bonds approved on 4 July 2017

European Parliament voted its own-initiative report on covered bonds on 4 July 2017[111]. The key points of the EU Parliament Report are that they favour legislation provided the approach is cautious. The EP stressed that the covered bond market has functioned well, while saying that diversity among covered bonds need to be maintained. It noted that an integrated framework needs to be principle-based, build on high-quality standards and aligning best practices

The EU Parliament prefers that the new covered bond Directive should distinguish between 'premium covered bonds', which do adhere to the Article 129 of the CRR, and 'ordinary covered bonds', which would meet structural requirements set out in the directive.

In addition, the report calls for a legal framework for ESNs, including the principles regarding dual recourse, asset segregation, bankruptcy remoteness, and transparency requirements. ESNs should also be exempted from bail-in.

The EU parliament favours that covered bonds will only be backed by mortgages or public sector loans, while ESN could finance riskier assets, such as SME loans, consumer credit, or infrastructure loans without a government guarantee.

EP stayed close to COMM and EBA in relation to defining covered bonds. It also noted that covered bonds issued by credit institutions from third countries should get a similar regulatory treatment if the legal, institutional and supervisory environment is equivalent to that in the EU. As such, the EU legislation could act as benchmark for the global covered bond market.

8. Further stakeholder consultations

[111] European Parliament Report: Bernd Lucke (A8-0235/2017), "Towards a pan-European covered bonds framework", approved 4th July 2017. http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2017-0235+0+DOC+XML+V0//EN

The Commission has continued consulting stakeholders through meetings on key aspects of the proposal to help further substantiate the analysis of the available policy alternatives in line with Better Regulation guidelines.

The stakeholder consultations are often initiated by the stakeholders wanting to address specific issues of their concern and also wanting to keep up with the harmonisation process.

8.1. Expert Group on Banking, Payments and Insurance (EGBPI)

The EGBPI has discussed the possible harmonisation of covered bonds on two meetings, the 9 June 2017 and the 28 September 2017.

At the first meeting the overall intention to have a three step approach in accordance with the EBA report from 2016 was presented and the decision announced on the CMU MTR was introduced. The majority of the Member States expressed support for the Commission approach and for keeping the ESNs as a separate instrument. In general, the discussion focused upon the harmonisation to be in line with the well-functioning national systems, and therefore most Member States specifically demanded for a harmonisation based on high level principles, some referring to the EBA report to be too detailed.

At the second meeting the discussion was more detailed, but in general Member States were still in support of the principles based directive leaving room for national implementation and not jeopardising the systems already working well.

III. Stakeholder input included in the harmonisations process

The stakeholder input can be grouped into two categories:

1. advice to change the existing framework to address concerns of a prudential nature
2. request of not disrupting the existing well-functioning national systems.

Stakeholder input belonging to the first group mainly came from the ESRB, the EBA, the ECB and to some extent from the national competent authorities in the Member States with well-developed covered bond markets and from the rating agencies.

Stakeholder input belonging to the second group mainly came from Member States with well-developed covered bonds markets and from issuers and investors alike. They advocated the Commission being very careful not to unduly disrupt those markets working well, while acknowledging the need for harmonisation to ensure that the structural features of covered bonds are well integrated in all existing and upcoming markets.

To include both types of stakeholder input, the Commission intends to define the structural features of the covered bonds in a directive, leaving room for national implementation. The Directive will be principles based to accommodate the wish of not changing the well-functioning market characteristics, but will include specific requirements addressing the areas considered necessary to ensure a prudentially solid framework.

To specifically address the prudential concerns regarding capital preferential treatment the Commission intends to make targeted amendments to the CRR art 129 thus justifying a continuous preferential treatment.

ANNEX 3 - WHO IS AFFECTED BY THE INITIATIVE AND HOW?

I. Practical implications of the initiative

Under the retained option (**option 2: minimum harmonization based on national regimes**) a harmonized legal framework for covered bonds would be established at EU level. This EU framework would aim at a minimum level of harmonization across the EU, building on the characteristics of existing national jurisdictions and seeking to avoid disrupting well-functioning markets. Under this option, the previous Article 52 of UCITS would be replaced by a new Directive defining the structural elements of covered bonds and Article 129 CRR would also be adjusted. This option will require Member States to transpose the new Directive into national legislation, and the issuers of and investors in covered bonds would have to adjust their businesses to changes in the resulting national frameworks. Grandfathering clauses would be foreseen for outstanding covered bonds.

This option is supported by all stakeholders: institutional stakeholders, supervisors, Member States and industry stakeholders alike. In particular, the EBA, the ECB, the Parliament, national and European supervisors have advocated for option 2. This is the option that fits with the EBA advice and the EP Report. A majority of Member States is also favourable to this option. Among them all the largest markets. The ECBC representing almost all issuers in the market and investors is also in favour of this option.

2. Summary of cost and benefits

Benefits and costs of option 2 for each category of stakeholders have been summarized in table 1. Main benefits refer to issuers who would enjoy a lowering of funding costs and for citizens who would enjoy in their turn lower borrowing costs as well. Investors would benefit from a stronger regime that better protects them, however some details left to Member States' discretion could introduce weaknesses (for example in the relationship between extendible structures and liquidity buffer). Costs would increase for issuers and supervisors, while they would decrease for investors and society.

Table 1– Impacts on different stakeholders of Option 2

	Issuers	Investors	Supervisors	Citizens
Benefits	↑↑	↑	↑	↑↑
Costs	↑↑	↓	↑	↓

Tables 2 and 3 present the typical benefits and costs deriving from the specific actions to be undertaken in order to implement option 2. Benefits and costs are described for different categories of stakeholders, as applicable. In some cases, it is not possible to quantify impacts, in particular at a high level of detail. Furthermore, the baseline itself varies strongly across countries and these figures are not available in most cases. The exercise in the following tables will therefore mainly follow a descriptive approach and specific actions along with their benefits and costs will be described in detail.

Table 2– Overview of benefits: preferred option

I. Overview of Benefits (total for all provisions) – Preferred Option		
Description	***Amount***	***Comments***
Direct benefits		
Defining common standards for CB structural features	1. Stimulate the development of CB markets, increasing issuance (between 50% and 75% of additional EUR 342 bn) 2. Lowering costs of funding for issuers. At individual level: i. funding savings of 30-45 bps where CB issuance substitutes unsecured debt financing, ii. further funding savings of about 5 bps related to a more robust framework. At aggregate level funding costs savings of between 50% and 75% of the benchmark long-term benefits of €2.2-2.7 billion per year. 3. Diversify investor base (60% of investors other than banks) 4. Facilitate cross-border investments 5. Attract investors from third countries (16.5% of investments from third countries for additional EUR 115 bn in the long run from outside the EU) 6. Strengthening investor protection 7. Addressing prudential concerns	*Stakeholders who benefit* a) issuers b) investors c) citizens
Defining principles for eligible cover assets and coverage requirements	1. Strengthen the coverage requirements ensuring investors' rights 2. Prudential benefits 3. Reducing due diligence costs for investors 4. Encourage issuance by smaller banks	*Stakeholders who benefit* a) investors b) issuers
Define special public supervision	1. Prudential benefits 2. Strengthen investor protection	*Stakeholders who benefit* a) investors
Define transparency requirements	1. Reduced due diligence costs for investors compared to the baseline	*Stakeholders who benefit* a) investors
Setting liquidity requirements	1. Prudential benefits 2. Strengthen investor protection	*Stakeholders who benefit* a) investors
Define criteria for EMS	1. Address prudential concerns regarding market innovation	*Stakeholders who benefit* a) investors

	2. Strengthen investor protection	
Setting overcollateralization requirements (between 2% and 5%)	1. Strengthen investor protection in jurisdictions with lower levels 2. Potential reduction of OC in jurisdictions with higher levels	*Stakeholders who benefit* a) investors b) issuers
Setting rules for derivatives	1. Strengthen the coverage requirements ensuring investors' rights 2. Hedging of currency/other risks 3. Prudential benefits	*Stakeholders who benefit* a) investors b) issuers
Other adjustments to art 129 CRR	1. Prudential benefits 2. Strengthen investor protection	*Stakeholders who benefit* a) investors
Indirect benefits		
Defining common standards for CB structural features	1. Overall savings in borrowing costs for the real economy of between 50% and 75% of the benchmark long-term benefit of €1.5-1.9 billion per year.	*Stakeholders who benefit* a) citizens
Setting overcollateralization and LTV limits only in CRR	1. Reducing pro-cyclicality of LTV and overcollateralization requirements	*Stakeholders who benefit* a) issuers b) citizens

Table 3– Overview of costs: preferred option

II. Overview of costs – Preferred option(s)							
		Citizens/Consumers		Issuers/Investors		Competent authorities	
		One-off	Recurrent	One-off	Recurrent	One-off	Recurrent
Defining common standards for CB structural features, cover asset and transparency requirements.	Direct costs	NA	NA	Administrative and compliance costs for implementing changes (IT system, legal advice, credit rating, etc.). MS with lower costs would see an increase to benchmark levels of €590,000 to €1.8 mil.	Administrative and compliance costs of new rules (audit and management, monitoring fees, supervisory, licensing costs). MS with lower costs would see an increase to benchmark levels of between €300,000 and €475,000/year.	NA	NA
	Indirect costs	NA	Stronger cover assets requirements may reduce lending available for some segments	NA	Need of more collateral may reduce lending and increase asset encumbrance	NA	NA
Define special public supervision	Direct costs	NA	NA	NA	NA	Adjustment to new supervision rules	Higher enforcement costs (licensing, monitoring and auditing). "Light touch" jurisdictions would tend towards the benchmark of €25,350 per issuer-year but the majority of them are not expected to hit the benchmark.

	Indirect costs	NA	NA	NA	NA	NA	NA
New liquidity requirements	Direct costs	NA	NA	Administrative costs for implementing the changes (i.e. IT system)	1. Costs of carry of liquid assets in the cover pool (depending on level of interest rates) 2. Lowering the availability of liquid assets	Adjust supervision to new rules	NA
	Indirect costs	NA	NA	Higher issuance /conversions of EMS covered bonds (conversion costs of 0.05%).	Transfer of liquidity risk on investors if EMS covered bond issuance	NA	NA
New criteria for EMS	Direct costs	NA	NA	Administrative and compliance costs for implementing the changes (i.e. legal advice)	NA	Adjust supervision to new rules	NA
	Indirect costs	NA	NA	NA	Shifting liquidity risk to investors	NA	NA
Setting overcollateralization	Direct costs	NA	NA	Administrative and compliance costs for implementing the changes (i.e. IT systems, legal advice)	Higher or lower costs of excess collateral, depending on jurisdiction	Adjust supervision to new rules	NA
	Indirect costs	NA	NA	NA	Increasing or reducing the level of asset encumbrance, depending on jurisdiction	NA	NA
Setting rules for derivatives	Direct costs	NA	NA	Administrative and compliance costs for implementing the changes (i.e. IT systems and legal advice)	Costs of monitoring derivatives in the cover pool	Adjust supervision to new rules	NA
	Indirect costs	NA	NA	NA	NA	NA	NA

Other adjustments to art 129 CRR	Direct costs	NA	NA	Administrative and compliance costs for implementing the changes (i.e. IT systems and legal advice)	Costs of monitoring LTV limits and substitution cover assets	Adjust supervision to new rules	NA
	Indirect costs	NA	NA	NA	NA	NA	NA

ANNEX 4 – ANALYTICAL METHODS USED TO CALCULATE BENEFITS

This annex presents the methodology, the assumptions and the results of an illustrative estimation of the untapped potential of the EU covered bonds market in terms of additional issuance and funding cost benefits. The resulting figures should be considered as estimates of the maximum long-term potential annual savings in funding costs for a fully unified EU covered bond market.

The estimates of funding benefits take the current level of bank lending as given. This assumption is rather conservative, as the supply of bank lending could increase as a result of better funding conditions for banks. It is also worth noting that the impacts are expressed in gross terms. In particular, the impacts on: i. issuance costs at the level of the individual issuer and ii. supervisory costs, are not taken into account in this calculation.

I. Calculation of benefit benchmark b: additional issuance of covered bonds

The starting point for estimating the additional issuance potential is the definition of a simple benchmark for the level of issued covered bonds, expressed relative to the size of Member States' banking sector. For this purpose, this analysis first calculates the ratio of total outstanding covered bonds issued in each Member State, divided by total outstanding loans issued by resident monetary and financial institutions excluding the Central bank.

Next, the benchmark is defined as the median level of outstanding covered bonds among EU Member States considered as having an established covered bonds market.[112] A median-based benchmark is again a rather conservative choice, justified by the objective to minimize negative effects of asset encumbrance on the issuers' risk for unsecured creditors. Indeed, by definition, one-half of Member States with established markets currently operate with higher levels of CB issuance.

It is further assumed that under a fully unified EU framework, countries below the benchmark level would gradually converge to this value in the long run (beyond a ten-year horizon), whilst countries currently above the benchmark are assumed to remain at their current level. Lastly, we assume that covered bond funding would be replacing unsecured debt funding. These two long-term funding options can be seen as natural substitutes for financing secured long-term lending, as suggested for example by Illes et al. (2015, p. 10).[113] The latter study also confirms that all EU Member States' banking sector seem to have sufficient levels of unsecured debt to be substituted by covered bonds.

[112] Countries labeled for the purposes of this estimation as "Established markets" are Denmark, Sweden, Spain, Portugal, Finland, Austria, Germany, France, Italy, Netherlands, Belgium, and Luxembourg (ordered by the relative size of their outstanding covered bonds markets). Countries labelled as "Recent markets" are essentially the new Member States and countries whose covered bond frameworks have been introduced or significantly amended after the year 2000. This group of countries is composed of the Czech Republic, Slovakia, Ireland, Hungary, Greece, Cyprus, Poland, Bulgaria, Estonia, Croatia, Lithuania, Latvia, Malta, Romania, and Slovenia.

[113] See A. Illes, M. Lombardi and P. Mizen (2015): 'Why did bank lending rates diverge from policy rates after the financial crisis?' BIS Working Papers No 486, February.

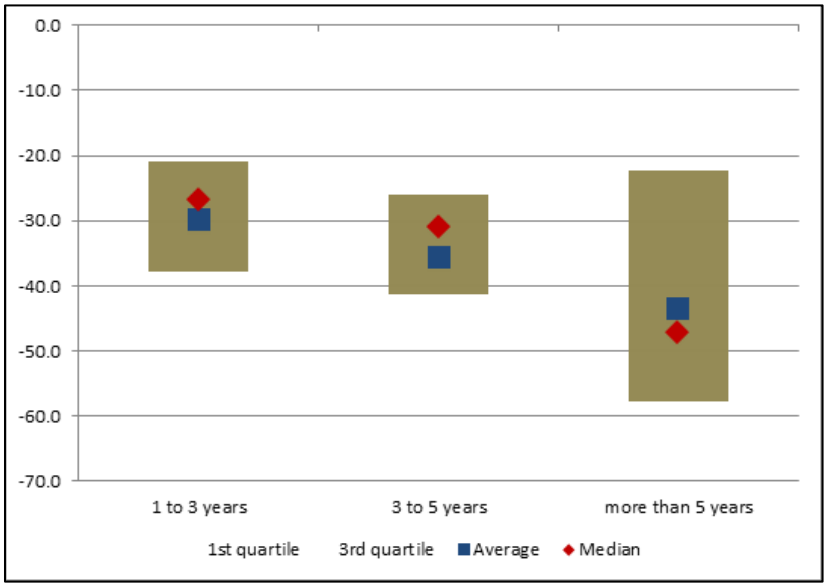
II. Calculation of benefit benchmark c: savings in terms of funding costs for banks issuing covered bonds

Funding benefits related to additional CB issuance

According to Fitch data, covered bonds get an uplift of between 3 and 6 notches in credit ratings in 80% of the programmes and on a quarter of them they get 4 notches uplift. This represents a significant improvement in credit ratings. The significantly better credit rating implies lower costs of funding for credit institutions[114].

The Commission services estimate[115] that for a representative sample of EU banks composing roughly 35% of the EU market for covered bonds, the cost of issuing covered bonds is on average 30bps to 45bps lower than for senior unsecured debt, other things being equal.[116] As can be seen in Figure 1, this benefit is larger for bonds with longer maturities. In addition, as expected, banks with lower credit ratings benefit more from issuing covered bonds than highly rated banks. For one bank in the sample the reduction in funding costs from issuing covered bonds is estimated to be up to 100bps.

Figure 1. Difference in funding costs (z- spread) for covered bonds compared to senior unsecured debt



Source: Commission Services estimates.

[114] There is a negative relationship between credit ratings and interests paid to investors: the higher the credit rating, the lower the default risk and the lower the interest rate to be paid to investors.

[115] Estimates are achieved by comparing z-spreads of outstanding covered bonds with the z-spreads of similar (in terms of currency, type of bonds, amount issued and maturity) senior unsecured bonds for the same bank. A total of 91 bonds were analysed from 26 different banks across 9 EU Member States. For France and Denmark, we compared covered bonds issued by specialised subsidiaries with similar bonds issued by parent companies.

[116] According to the German association of Pfandbrief Banks (VdP), spread differentials between senior unsecured and covered bonds from a sample of selected large European covered bond issuers for securities with a 5 years maturity are even higher as they range between 60 and 70 bp. While it is true that covered bonds are more expensive to issue than unsecured debt, VdP estimates that the breakeven point of this spread that makes issuing covered bond not profitable anymore is around 20 basis points. However, this break-even figure has not been taken into consideration when calculating gross benefits of issuing covered bonds instead of unsecured debt for issuing banks.

These estimates were obtained by comparing the z-spreads[117] of outstanding covered bonds with similar senior unsecured bonds (same currency, type of bonds, amount issued and maturity) for the same bank. A total of 91 bonds were analysed from 26 different banks across 9 EU Member States. For France and Denmark, covered bonds issued by specialised subsidiaries were compared with similar bonds issued by parent companies.

The funding cost differentials of 30 bps to 45 bps are used to estimate the overall funding benefits of additional CB issuance on the assumption of unchanged yields for unsecured creditors.[118] The actual benefits could be closer to the low-end estimate of 30 bps, given possible effects of higher CB issuance on the perceived risk of less senior funding sources (as per a traditional Modigliani-Miller mechanism).

The order of magnitude of the funding cost advantage of covered bonds relative to unsecured debt is confirmed by Illes et al. (2015). For 11 EU Member States, the study shows an average funding cost advantage for covered bonds of 82 bps before the global financial crisis, and 28 bps during and after the crisis.

Funding benefits related to reduced risk perceived by CB investors

Funding costs benefits related to higher investor confidence under a more predictable and consistent framework across all EU Member States are more difficult to estimate. The external study funded by the Commission estimates these benefits based on expert judgment as multiple basis points, with **5 bps** being a "relatively conservative estimate of the potential benefit".[119] This value is used for the evaluation of the benefit of a stronger EU framework for covered bonds.

Anecdotal evidence may help substantiate this point. Proposed amendments to Slovakia's covered bond legislation aimed at addressing weaknesses in the current framework and at aligning it with European best practices are expected to come into force in January 2018. They would include credit strengthening characteristics (for example preventing an automatic acceleration of covered bonds when the issuer is under insolvency proceedings) which, according to Fitch, could induce the agency to improve the ratings of covered bonds issued under Slovakian law. At the same time, Fitch is concerned that other features of the proposal (for example the liquidity buffer) are weaker than in other countries and those aspects would need to be clarified before Slovakian covered bonds get the rating uplift. This example sheds some light on the potential of defining clear credit enhancing features for covered bonds at European level as this could help achieve credit enhancement and the related rating uplifts across the whole EU. In turn, better ratings would translate into lower yields for issuers.

[117] Z-spreads are bond spreads that take into account, and correct for where necessary, for differences in the repayment of the principal of bonds. They are the most suitable spreads for comparison of different bonds.

[118] Birchler (2000) shows how introducing different levels of debt priority can reduce the overall cost of funding of a bank. See U.W. Birchler (2000): "Bankruptcy Priority for Bank Deposits: A Contract Theoretic Explanation", *Review of Financial Studies*, Vol. 13, Issue 3, pp. 813–840.

[119] ICF, 2017, p.55

III. Results

The resulting estimates are presented in Table 1. Overall, under the above assumptions, the additional issuance potential for CB would be up to 342 EUR billion.

This new issuance would entail an annual potential funding cost benefits between 2.2 and 2.7 EUR billion in the long term.

Using the estimated long-term pass-through rate by Illes et al. (2015) of about 70%, this could lead to potential annual savings for EU borrowers of 1.5 to 1.9 EUR billion in the long term.

Table 1 – Illustrative estimation of additional issuance potential and funding benefits

		CB outstanding	CB outstanding	Additional issuance potential	Annual benefit of increased issuance		Annual benefit of stronger regime
					Low end	High end	
		(EUR bn)	(% of loans)	(EUR bn)	(EUR bn)	(EUR bn)	(EUR bn)
Established markets	Denmark	391,1	61,1%	0,0	0,00	0,00	0,20
	Sweden	222,4	28,5%	0,0	0,00	0,00	0,11
	Spain	259,3	15,9%	0,0	0,00	0,00	0,13
	Portugal	33,5	13,8%	0,0	0,00	0,00	0,02
	Finland	33,8	10,9%	0,0	0,00	0,00	0,02
	Austria	48,0	9,0%	0,0	0,00	0,00	0,02
	Germany	373,8	8,0%	25,0	0,08	0,11	0,20
	Ireland	23,8	7,7%	2,6	0,01	0,01	0,01
	France	308,6	6,7%	81,8	0,25	0,37	0,20
	Italy	146,6	6,0%	60,2	0,18	0,27	0,10
	Netherlands	67,6	4,9%	50,9	0,15	0,23	0,06
	Belgium	19,0	3,4%	28,6	0,09	0,13	0,02
	Luxembourg	7,9	1,8%	29,5	0,09	0,13	0,02
New markets	Czech Republic	13,1	8,8%	0,0	0,00	0,00	0,01
	Slovakia	4,2	8,2%	0,2	0,00	0,00	0,00
	Hungary	2,2	3,5%	3,1	0,01	0,01	0,00
	Greece	4,5	2,1%	13,3	0,04	0,06	0,01
	Cyprus	0,7	1,0%	4,9	0,01	0,02	0,00
	Poland	2,2	0,8%	21,2	0,06	0,10	0,01
	Bulgaria	0,0	0,0%	2,9	0,01	0,01	0,00
	Estonia	0,0	0,0%	1,9	0,01	0,01	0,00
	Croatia	0,0	0,0%	3,6	0,01	0,02	0,00
	Lithuania	0,0	0,0%	1,8	0,01	0,01	0,00
	Latvia	0,0	0,0%	1,6	0,00	0,01	0,00
	Malta	0,0	0,0%	1,4	0,00	0,01	0,00
	Romania	0,0	0,0%	5,3	0,02	0,02	0,00
	Slovenia	0,0	0,0%	2,3	0,01	0,01	0,00
	Total established			278,6	0,84	1,25	1,11
	Total new markets			63,4	0,19	0,29	0,05
	Total			**342,0**	**1,03**	**1,54**	**1,15**

Source: Commission services.
Note: The table shows a simplified estimate of the additional covered bond issuance potential, the annual funding cost benefits related to this additional issuance (the low and high end refer to a 30 bps resp. 45 bps saving compared to unsecured debt), and the annual funding cost benefits related to a lower risk perception by investors owing to a stronger CB framework.

ANNEX 5 – FURTHER DATA AND EXPLANATIONS (COSTS)

I. Costs of setting up and running a covered bond programme for an issuer

There are significant upfront and ongoing costs involved in establishing and running a covered bond programme. These costs are a function of several factors such as: (i) the size of the covered bond programme of an issuer; (ii) the structure of the covered bond issuer. For example, issuance from a specialist credit institution involves significant additional costs when compared with issuance from universal credit institutions; and (iii) country specific factors such as legal and supervisory requirements.

This section compiles data from various sources (online survey, OPC responses, Credit Rating Agencies and supervisors) collected by ICF to provide estimates of: (a) the initial costs of setting-up a covered bond programme; (b) the ongoing (annual) costs of running a covered bond programme; and (c) the costs of single issuance. It also compares the costs of covered bonds issuance as compared to other collateralised instruments.

1. Upfront costs of establishing a covered bond programme

The upfront costs of setting up a covered bond programme comprise:

- The cost of setting up IT systems to support the administration and management of the programme including risk management, monitoring and reporting of the cover assets etc. (see table below);
- Legal fees including the cost of a prospectus (see table below);
- Application and registration fees i.e. the cost of registering the programme with the regulator or supervisor (see table below);
- Investment bank fees - these are typically a function of maturity of the bond e.g. for a standard five year deal, investment banking fees would be of the order of 0.2% of the amount raised. Sometimes, an issuer does not pay any fees on the basis of an agreement that the issuer will use the investment bank for the first few bond deals and/or give that bank a disproportionate amount of the total fees payable on them[120].
- Rating agencies' fees - a minimum set-up and first issuance fee of €65,000 (limited approach) to €100,000 (full approach) for CEE issuers and €70,000- €150,000 (Western Europe) is charged by Fitch Ratings. S&P charges a standard fee €85,000 for annual surveillance of a covered bond programme.

Table 1. Covered bonds programme set-up costs: IT, legal and regulatory costs (based on survey responses)

	IT costs	Legal fees	Application & registration fees
Belgium	~ €100,000	~€250,000	~€10,000
Denmark	€2 - 3.5 million	€100,000 - €150,000	*
Finland	~ €1 million	€0.5 - 1 million	~€1,000
France	~ €1 million	€0.5 - 1 million	~€5,000 (AMF)

[120] When a bond is launched typically three banks will run it for the issuer, each will get one third of the fees (€1bn bond x 20cent fees = €2mn / 3 banks = €666k each). Sometimes if one structured the programme the issuer might announce that the fee split is €1mn for the structurer, €0.5mn for the other two banks. The total fees paid don't change but the structuring got recognised with a fee of €333k

	IT costs	Legal fees	Application & registration fees
			€13,000 - €110,000
Germany	"substantial"	"millions"	€5,000 - €20,000
Hungary	:	:	~€3,000
Italy	€150,000 - €1 million	€200,000 - €300,000	€8,000 - €10,000
Luxembourg	€30,000 - €200,000	:	:
The Netherlands	€100,000 - €300,000	€150,000 - €350,000	€10,000 - €25,000
Poland	:	€250,000 - €300,000	:
Portugal	~ €30,000	€20,000 - €350,000	€3,000 - €5,000
Sweden	€3 - 5 million	€50,000 - €2 million	€10,000 - €50,000
The United Kingdom	€100,000 - €2 million	€550,000 - €1.2 million	€27,500 - €50,000

Source: ICF survey, n=40

**Danish institutions do not pay explicitly for a license. The institutions under the supervision of Danish FSA pay for supervision in a broad sense according to specific formulas for allocating the total costs of running the Danish FSA to the different segments of institutions and within these different institutions in the specific segment. E.g. in a given year a mortgage credit institution under supervision applies for a license to issue covered bonds. This generates costs for the Danish FSA but these are not directly allocated to the institution in question; they are part of the total costs of DFSA allocated according to the system mentioned above. There is only a charge to an institution as such, and this is for the relative share of the cost of running the Danish FSA irrespective of the amount of bond issues that it makes.*

Overall, set-up costs range from hundreds of thousands to a few million euros across various EU jurisdictions.

2. Ongoing costs of running a covered bond programme

The annual costs of running a programme, as indicated by respondents to the ICF survey, are indicated in the table below.

Table 2. Annual costs of running a covered bond programme (based on survey responses)

	IT costs	Legal fees	Cover pool monitor	Audit fees	Other supervision and regulatory costs
Belgium	~ €10,000	~ €25,000	~ €80,000	~ €50,000 (at start)	:
Denmark	~ €2 million	€10,000 - €50,000	:	~ €70,000	~€100,000
Finland	€150,000 - €200,000	~ €100,000	:	~ €30,000	~ €20,000
France	€50,000 - €400,000	€40,000 - €150,000	€65,000 - €120,000*	€100,000 - €850,000	~ €300,000
Germany	~ €150,000	:	€30,000 - 50,000**	~ €125,000***	
Hungary	:	:	~ €90,000	:	:
Ireland	:	~ €300,000	~ €200,000	~ €100,000	€1 million
Italy	:	€25,000 - €110,000	€20,000 - €60,000	€10,000 - €130,000	€10,000 - €20,000
Luxembour	:	:	~ €30,000	:	:

	IT costs	Legal fees	Cover pool monitor	Audit fees	Other supervision and regulatory costs
g					
The Netherlands	€10,000 - €100,000	€40,000 - €250,000	€10,000 - €40,000	€10,000 - €60,000	€5,000 - €25,000
Portugal	~ €5,000	€10,000 - €80,000	€25,000 - €30,000	€30,000 - €75,000	€10,000 - €12,500
Sweden	€100,000 - €750,000	€7,500 - €500,000	~ €50,000	€10,000 - €50,000	€5,000 - €75,000
The United Kingdom	€60,000 - €240,000	€60,000 - €180,000	€10,000 - €50,000	~€120,000	€120,000 - €2.2 million

Source: ICF survey, n=41
** Appointing a Specific Controller is compulsory under French law. The Specific Controller is an audit firm different from the legal auditors of the CB Issuer or the parent group of the CB Issuer. The Specific Controller not only acts as a cover pool monitor but has wider functions. The annual cost of appointing a Specific Controller ranges from €50,000 to €300,000 depending of the size and complexity of the issuer (source: French controleur specifique).*
*** see annex X. The higher range applies to a large issuer with two alternate monitors*
****includes cost of on-site cover pool audits which range from €10,000 for small savings banks to 6-digit amounts (at approx. €100,000) for major Pfandbrief banks, carried out by leading auditing firms. Additional supervision costs might include mandatory statements by chartered external auditors on appropriate organisation of the Pfandbrief business in the annual report + costs of internal control of observing the limits under the Pfandbrief Act + costs of coverpool insertion + lists of coverpool assets to be sent to BaFin. Some issuers carry out internal audits by their compliance departments, but this is not mandatory.*

Aside from above, issuers have to pay a fee to Credit Rating Agencies for annual surveillance of a covered bond programme. As indicated in the previous section, S&P charges a flat fee of €85,000 per programme. The fee charged by Fitch Ratings depends on the region and asset cover pool size – see table below.

Table 3. Annual programme fees charged by Fitch Ratings (full approach)

Assets	Western Europe	CEE
Upto and including €2.5 billion	€75,000	€40,000
€2.5 – 5 billion	€85,000	€50,000
€5 – 10 billion	€95,000	€60,000
€10 – 15 billion	€105,000	€80,000
€15 – 25 billion	€115,000	€80,000
> €25 billion	€130,000	€80,000

Source: 2017 S&P fee schedule. For a limited approach, the fees are €50,000 for Western European issuers and €40,000 for CEE issuers regardless of asset cover pool size

Survey respondents also indicated the following additional costs:

- Staffing costs for running the covered bond programme ;
- Cost of back office operations – these can be expected to be negligible once a covered bond programme has been set-up involving monthly running of reports or checking of accounting entries. Smaller issuers with less sophisticated IT systems might need to carry out manual intervention, in which case these would involve at most 0.5 FTE;
- Cost of professional bodies e.g. ECBC (€8,000 per year) and national industry body;

- Cost of the covered bond label comprising[121]:
  - Initial Registration fee of €5,000 payable with the registration of a new cover pool
  - Annual Label fee of €3,800 in subsequent years where issuers will confirm/re-confirm their compliance to the Label Convention;
  - An additional volume issuance fee of €1 per million of new issuance (capped at €5,000 per year; not payable on the first year of a new Label).
- The fees and expenses of the Bond Trustee and Security Trustee (if any), ranging from €7,500 to €72,600

3. Cost of single issuance

The following costs are associated with each issuance:

- Rating fees: Fitch rating charges fees on all covered bond issuance as a percentage of the total issue size. The fees range from 0.25 bps (limited approach) to 1.0 bps (full approach) in Western European countries. A flat rate of 0.5 bps is charged in CEE countries. It should be noted that issuers often get 2-3 ratings for their issues;
- Legal fees per issue is typically either nothing or a very small amount, but for a small number of issuers (in particular those who do not issue from a standard programme), these could range from 100,000 to €300,000;
- The fees and expenses incurred or payable in connection with the listing of the covered bonds on stock markets. These can range from €4,000 in UK to €150,000 in Sweden.
- Fees relating to ISDA documentations (Swaps), which depends upon the number of counterparties an issuer has;
- In Hungary, audit fees are payable per issuance (~ €20,000 per issue).

4. The costs of covered bonds issuance as compared to other collateralised instruments

As indicated earlier, the upfront costs of establishing a covered bond programme amount to at least €0.5 million and are actually much higher in several EU jurisdictions. The ongoing costs are also high, ranging from €0.25 million to a few million euros.

According to many respondents to the OPC, although the costs of setting up and running a covered bond programme are higher than other collateralised instruments in absolute terms, these can be spread across several issues, which eventually results in lower operational costs for covered bonds as compared to securitisations. Many respondents stated that the advantage of a covered bond programme is that once set up and registered, multiple transactions can be issued under the programme i.e., each new issuance benefits from the existing structure of the covered bond programme and bears only a fraction of the costs. In contrast, for each new ABS/RMBS issue, set up cost have to be incurred. Covered bonds are thus, regarded as a more efficient funding tool by market participants.

The specific cost advantages of a covered bond programme over securitisation transactions are as follows:

- All covered bonds issued under a specific jurisdiction adhere to the same legislative requirements, whereas each securitisation transaction is a unique instrument with unique contractual agreements. Consequently for securitisation transaction, an issuer has to incur costs relating to due diligence of the portfolio; creation and maintenance

[121] Covered bond label website: https://www.coveredbondlabel.com/procedures-label-fee [accessed 18.02.2017]

of ad hoc structures such as SPVs; developing legal documentation; and advisory and rating costs (which are usually much higher for securitisation transactions as compared to covered bonds[122]).

- The ability to provide a single investor reporting for an entire covered bond programme is less costly as compared individual securitisations.
- A single swap covering a covered bond issue is also less costly than multiple swaps for heterogeneous securitisation transactions.
- Securitisation transactions often involve the constitution of the legal entity (SPV) and the need for two different credit ratings, which implies additional costs.

Finally, from an investor's perspective, due diligence costs are lower for covered bonds as it is a more standardised product compared to securitisations.

II. Cost of supervision

Within the framework of this study, detailed data was also collected from supervisors in three jurisdictions representing different supervisory regimes. The findings are reported below.

1. Denmark

The key tasks from the supervisory perspective in the Danish context entail the following[123]:

- Issuance of license – one off covered bond specific licensing;
- Period review and analysis of the data/ documentation provided by the issuer;[124]
- Periodic quality check of cover assets including checks on eligibility of assets and real estate valuations practices and outcomes (NB: This includes regular on-site visits)
- Periodic Monitoring of the exposure of the covered bond programme to market risk and liquidity risk;
- Periodic checks of minimum mandatory over collateralisation requirements;
- Evaluation of operational risks of the issuer.

Supervision of mortgage credit institutions is carried out by the Danish FSA. The basic rule is that the institutions under supervision pay for the costs associated with their supervision. The cost of running the Danish FSA is therefore, allocated to the different units under supervision based on different measures. In practice there is an allocation to each group of institutions in question, e.g. mortgage bank, universal bank, insurance company, investment fund, etc. Within these groups the allocated costs are further allocated based on different measures. Mortgage banks as a group pay 13.2% of the annual costs of the Danish FSA. Additional fixed fees apply to certain units under supervision, although these are largely insignificant in comparison. Within the group of mortgage banks this amount is divided between the mortgage banks according to their total assets.

As a rough estimate, circa 17 FTEs across different departments of the Danish FSA are involved in supervising covered bond programmes (of which roughly 3.5 FTEs are involved

[122] This is because securitisation transactions are more complex, involving the creation of ad hoc structures, leveraged nature of tranche-structures (several tranches which are collateralised by the same asset pool are rated separately)

[123] ECBC, 2017. Comparison of frameworks. Available at: http://www.ecbc.eu/framework/freeCompare and EBA, 2014. EBA Report on EU Covered Bond Framework and Capital. Available at: https://www.eba.europa.eu/documents/10180/534414/EBA+Report+on+EU+Covered+Bond+Frameworks+and+Capital+Treatment.pdf

[124] For instance, reports of mortgage banks to the Danish FSA are provided on the quarterly basis and cover credit risk exposure, market risk exposure and solvency

in on-site inspections of covered bond issuers). The average salary cost per FTE is 650,000 DKK (~ €87,400). In addition, the average overhead per FTE is 390,000 DKK (~ €52,450). The annual costs incurred by the Danish FSA can be estimated at ~ €2.4 million. Considering that there are 9-10 issuers in Denmark, the average cost of supervision works out as €237,745 - €264,161. The average cost per covered bond programme can be estimated as €103,367 (based on ECBC data on the number of programmes = 23 in 2014 and 2015).

2. France

The supervisory regime for covered bonds comprises several entities. Some with no specific role in relation to covered bonds and some with a specific role.

The two bodies with no specific role in relation to the covered bond framework are:

- AMF (Market supervisor): since as issuers of debt securities, covered bond issuers have to prepare a prospectus and submit it for AMF approval.
- Legal/ statutory auditors: as credit institutions, covered bond issuers need to have two legal auditors of their accounts.

The two bodies with specific roles in relation to the covered bond framework are the ACPR and the Specific controller, which will be the focus of this section.

Regulatory Supervisor (ACPR)

The main functions of the ACPR are:

- Approval of the establishment of the CB Issuer/program
- On-going supervision (based on quarterly and annual regulatory reports received from the Specific Controller, interviews and due diligences of the Specific Controller)
- Investigation rights: on-site inspections of covered bond issuers by the ACPR itself are not frequent (for illustrative purposes, it can be assumed that over a ten-year period, a covered bond issuer would typically have one chance in three to be inspected). In case they are performed though, these are in-depth inspections lasting several weeks or months.

The regular inspections are carried out by the Specific Controller who then reports to the ACPR.

At the ACPR, the special public supervision of the CB issuers is conducted by the banking supervision teams, along with their supervision under CRD4-CRR (covered bonds issuers being credit institutions in French law). Estimates of costs pertaining specifically to CB-specific public supervision are not readily available (as there are no CB dedicated teams / individuals and costs do not appear separately in ACPR analytical accounting).

As credit institutions under French law, covered bond issuers are subject to the same fees as any other credit institution (or "contribution pour frais de contrôle") according to article L.612-20 of the Code Monétaire et Financier. In this case, being a CB issuer does not imply specific treatment and the amount is not related to the work done by the supervisor for monitoring the cover pool of covered bond issuers.

Specific Controller (art. L.513-23 of CMF)

The existence and appointment of the Specific Controller is enshrined in the French legal/regulatory covered bond framework: he/she is not appointed following a contractual agreement with the issuer as is frequent for cover pool monitors in other jurisdictions.

Although part of the public supervisory regime, the Special Controller is a staff member of a private audit firm (different from the firm auditing the accounts of the CB Issuer or the parent group of the CB Issuer to guarantee independence and absence of conflict of interest). The Specific Controller, a professional registered to the CNCC (French Audit Association), is chosen by the issuer after approval from the supervisor (ACPR).

The fees of the Specific Controller are 100% charged to the Issuer. These costs range from €50,000 to €300,000 per year depending of the size and complexity of each issuer.

The responsibilities of the Specific Controller (wider than the tasks of cover pool monitors in other countries as he/she undertakes part of the tasks typically undertaken by the supervisor) are as follows:

- Controls the eligibility of cover pool assets based on tests conducted on a representative sample of cover pool assets (generally on annual basis)
- Controls issuer's compliance with the regulatory calculation requirements: OC, liquidity buffer, maturity gap, coverage plan on a quarterly basis and issues a quarterly review certification
- Controls the compliance of valuation methods applied to cover assets (properties) for cover pools based on home loans (annual certification, which is disclosed with the financial statements of the CB Issuer)
- Must alert the supervisor and the management if the matching in terms of maturity, currency or interest rate appears excessively unsafe and jeopardizes the bondholders
- Delivers pre-issuance controls ensuring that new forecasted issuances would not entail a breach of any regulatory requirements (on a quarterly basis; quarterly review certification + specific review certification for each issuance > €500 million).

Germany

Licensing

Fees are levied for certain activities in relation to Pfandbrief business (cf. specifically section 2 of the schedule of fees, appendix to FinDAGKostV, http://www.gesetze-im-internet.de/findagkostv/anlage.html, German only), most relevant are:

- the fee for extending the license to conduct Pfandbrief business (for establishment of credit institution including Pfandbrief business the fee for the entire licensing process ranges between €5,000 and 20,000; for the more common case of extending an already existing license to also include Pfandbrief business, the fee is 25% to 100% of the "establishment" fee), and
- the fee for appointing a cover pool monitor (first-time appointment €305; extension of appointment €140).

The rest of the existing Pfandbrief-related types of fees, typically in relation to BaFin's waiving of certain requirements as provided for by the Pfandbrief Act, have no practical relevance. Beyond this, no specific attribution of costs to Pfandbrief banks for Pfandbrief-related supervisory activities applies; these costs thus are borne by way of all supervised entities being apportioned a share in BaFin's costs not yet borne otherwise ("Umlagefinanzierung").

Cover pool monitor (annual)

In Germany, the cover pool monitor (CPM) is appointed by BaFin. S/he is not BaFin staff, but an independent individual. The CPM is remunerated according to fees set by BaFin, as well as reimbursement of necessary expenses, in both instances to be paid by the Pfandbrief bank. The Pfandbrief bank is prohibited to award any additional benefits to the CPM. The scheme for setting CPM's compensation on a monthly basis is composed of a fixed amount (€700), a variable add-on in response to Pfandbriefe in circulation (the variable add-on amount is expressed as a %-point of the fixed amount; ranges from 0% - circulation below €1,000mn to 175% for circulation above €30,000mn), and a premium (+25%-points in case of cover pools composed mainly of complex CRE financings or complex public sector financings or a very high number of retail RRE financings; individually, the premium rate may be set at +50%-points if thoroughly justified) or rebate (-25%-points in case of non-complex ship financings or other large lot-size financings, or to compensate for high degree of work participation of deputy CPM) for certain individual aspects applicable to the variable add-on. The maximum compensation without individual adjustments thus amounts to a fixed amount of €700 + 175% of fixed amount €1,225 = €1,925 Euro for circulation above €30bn. The monthly remuneration of a CPM thus, varies between € 700 and 1,925.

On-site cover pool audits (conducted at two two-year intervals)

Department BA 57 at BaFin is responsible for conducting cover pool audits at Pfandbrief banks at two year intervals, either using its own staff (appraisers), or CPAs, experienced in the area of Pfandbrief cover pool audits (selected through a tendering process). Cost incurred due to a cover pool audit (ordered by reference to sec. 44 par. 1 of the Banking Act), are fully recoverable from the audited credit institution, cf. sec. 15 par. 1 no. 1 FinDAG (http://www.gesetze-im-internet.de/findag/__15.html, German only).

In case of cover pool audits performed by BaFin's own staff, the costs of cover pool audits, including travel expenses and offsite quality assurance activities are debited to the audited Pfandbrief bank.

In the latter case, BaFin launches and evaluates the tender, appoints a CPA to conduct the audit, evaluates the audit report, initiates transmission of the audit report to the audited Pfandbrief bank, and carries out any follow-up. Although BaFin commissions the audit contract, the auditing CPA typically is paid directly by the audited Pfandbrief bank.

Table 4. Cost of cover pool audits conducted at two year intervals, 2015

	Number of cover pool audits	**Total costs**	**Average costs**
CPA*	17	€718,000	€42,000
own staff	8	€224,000	€28,000

*Source: BaFin. Due to reorganisation of department BA 57 in 2014, and data for financial year 2016 not having been finalised, the following data have been compiled for 2015. * refers to tenders completed in 2015*

BA 57 total (100% FTE) budget for 2015 (with approximately 78% FTE dedicated for cover pool audit and supplementary functions) was as follows:

- Direct costs: €1.55 million (of which direct staffing costs: €1.51 million)
- Overhead costs: €1.18 million

The costs not recovered from Pfandbrief banks are funded as part of BaFin's general budget (i.e. via cost allocation to supervised entities, where being a Pfandbrief bank would not imply specific treatment).

ANNEX 6 – IMPLEMENTING THE RETAINED OPTION

4. The tables below describe the detailed provisions under the retained option specifying for each of them whether and how they deviate from the EBA 2016 Report and how they differ from the current situation in Member States where a legal covered bond framework is in place.

5. Retained Option (minimum harmonisation via directive)	6. EBA	7. Explanation for deviating from EBA	8. Situation in Member States (MS)	9. Comments on impacts on MS
10. Dual recourse	11. No difference	12. NA	13. All MS compliant	14. No significant changes for the majority of MS
15. Bankruptcy remoteness of covered bonds	16. Similar approach on the structural feature, but limited deviations for operational plans envisaged by the EBA.	17. No requirements for operational plans in order to be principles based and to avoid any duplication with BRRD resolution plans.	18. Very high level of compliance regarding the structural features	19. No significant changes for the majority of MS
20. Eligible assets (define principles to limit assets to high quality only, not listing assets in the Directive, only in the CRR)	21. Same approach	22. NA	23. Main assets: mortgages; public loans, ships, aircraft. Some MS have a smaller amount of less traditional assets. 24.	25. For some MS there could be limitations in comparison with current situation.
26. Assets located outside the EU (allowed under control by CAs)	27. For the EBA is step 3 (voluntary convergence) based on COMM equivalence.	28. We regulate in the Directive for prudential reasons and we leave decisions to MS for efficiency reasons.	29. High level of compliance	30. Minor changes foreseen for some MS
31. Intragroup CB and joint funding (allowed)	32. Not mentioned	33. More CMU relevant than prudential.	34. NA	35. Important to have for business models in some MS
36. Segregation of cover assets	37. Same approach	38. NA	39. Nearly all MS compliant	40. Concentrated impact in a few MS
41. Derivatives in the cover pool (allowed for hedging purposes only and part of segregation and	42. EBA more detailed on coverage requirement calculations	43. Less details as we want to be principle based	44. High level of compliance	45. No significant changes for the majority of MS

coverage requirements)	and on eligibility criteria for counterparties			
46. Cover pool monitor (optional and details left to MS)	47. The EBA requires this as mandatory and requires the details on appointment, eligibility criteria and main duties and powers to be defined in the Directive. EBA acknowledges tasks of monitor to be performed by special public supervisor.	48. Emphasis on the special public supervisor as the ultimate responsible for investor protection and to avoid confusion on supervisory responsibility. Need to be principles based and to avoid listing details in the directive on appointment, eligibility and main duties and powers of the monitor.	49. The majority of MS has a mandatory cover pool monitor. The rest have the tasks performed by the special public supervisor.	50. Costs only for countries where the monitor is not currently envisaged and who choose to make it mandatory.
51. Transparency (strengthened and moved from CRR to Directive)	52. Same approach in terms of frequency, details and directive level	53. NA	54. Impact mainly relating to frequency. HTT already ensuring common high level of transparency.	55. Limited.
56. Coverage requirement (nominal method as floor)	57. Same approach	58. NA	59. High level of compliance	60. Limited.
61. Liquidity buffer (to cover 180 days with no overlapping with LCR)	62. Same approach for the size (180 days), position in relation to coverage requirements and segregation, exceptions. Differences concerning the composition of the buffer, valuation, interaction with LCR. The EBA envisages a further assessment.	63. We do not want to touch on the LCR, we want to avoid any duplication with it and ensure compliance with LCR provisions.	64. All MS currently have some liquidity risk mitigation requirements in place.	65. As LCR is not affected, the impact is limited.
66. Extendable maturity structures (triggers effected not at	67. Same approach	68. NA	69. Only 2 MS having a framework in place	70.

the discretion of the issuer)			concerning extendable maturity structures.	
71. Special public supervision (with national authorities not linked with credit institution supervision)	72. Same approach concerning the content of the supervision. No mention of the level whether EU or national.	73. NA	74. For some MS supervision will have to be strengthened.	75. This would imply increased costs in MS where currently supervision is too light.
76. Permission to issue CB (by special supervisors)	77. Same approach	78. NA	79. For a number of MS the permission framework will have to change.	80. This would imply increased costs.
81. EU label (coexisting with national labels, not specifically granted)	82. Not envisaged	83. NA	84. Coexistin g	85. No specific costs
86. Equivalence regime (postponed to review report in two years time)	87. Not assessed	88. NA	89. Not existent	90. No specific costs
91. Grandfatherin g (yes)	92. Not assessed	93. NA	94.	95.

96.

97.

98. Changes in the CRR	99. EBA	100. Explanation for deviating from EBA	101. Situation in MS	102. Comments on impacts for MS
103. LTV limits (soft)	104. Same approach	105. NA	106. High level of compliance	107. No significant changes for the majority of MS
108. OC (risk based 2%-5%)	109. Same approach for application of OC to CRR compliant only CB and method of calculation (nominal). We deviate for the level: 5% for the EBA, while we chose a risk based approach ranging between 2% and	111. A risk based approach makes sense to link the level of overcollateralisation to the level of risk in the cover pool. Moreover, for some MS, 5% would be too high (DK and DE in particular), while for others 2% would be too low.	112. Almost all MS have some OC requirements today set at different levels.	113. The risk based approach entails lower costs than the 5% threshold envisaged by the EBA for all.

	5% The EBA left the evaluation of the level open to further analysis. 110.			

ANNEX 7 - GLOSSARY

Acceleration of a covered bond	Covered bonds are declared to be immediately due and payable, thus moving the payments to the bond holder to an earlier time than the original maturity date, typically due to default of the issuer and subject to strict demands.
Asset encumbrance	The percentage of assets on a bank's balance sheet pledged or otherwise used as security, including, inter alia to covered bond holders.
Bankruptcy remoteness of the covered bond	Meaning the covered bond may not automatically accelerate upon the issuer's insolvency or resolution.
BRRD	Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms (Bank Recovery and Resolution Directive).
Bullet structures	Covered bonds with soft-bullet structures provide for the possibility to extend the scheduled maturity for a certain period of time. Typically, this might be 12 months, but can also result in the structure becoming "pass-through" under specific conditions (conditional pass-through/CPT), which means that the cash flows from the assets in the cover pool are passed directly to the covered bond holders. The extension triggers may vary and can be defined by law, at the discretion of the issuer or a result of non-payment on the scheduled maturity date.
CMU	CMU is the Capital Markets Union, a plan of the European Commission to mobilise capital and establish a genuine single capital market in the EU.
Competent authority	The authority vested by the national covered bond regime with the function of exercising special public supervision for the benefit of the covered bond investors. The competent authority is not necessarily the same authority as the one responsible for the general prudential supervision of credit institutions.
Cover assets	The assets eligible for serving as security in a

	cover pool
Covered bond programme	Refers to the perimeter of claims and obligations as well as activities related to a specific covered bond product of the issuer, and to which protective measures of the respective covered bond regime would apply in the issuer's insolvency. Different issuances (different International Securities Identification Numbers (ISINs)) of the same covered bond programme do not necessarily constitute separate covered bond programmes. The term 'covered bond programme' can also be referring to covered bond activities executed by specialised covered bond issuers in some jurisdictions, where a licencing procedure refers to covered bond activities rather than to covered bond programmes.
Cover pool	The pool of assets that, at any point in time, constitute the security for the covered bonds. They must be segregated from other assets owned by the issuer to ensure certainty of bondholder claim.
Cover pool monitor	An internal or external entity other than the ordinary auditor of the covered bonds issuer, monitoring specific tasks of the issuance of covered bonds in going concern, e.g. verifying coverage tests or signing off inclusion and removal of cover assets in/from the cover pool
Coverage requirement	Article 52(4) of the UCITS Directive establishes the coverage principle of covered bonds requiring that, during the whole period of the bonds' validity, the assets underlying the covered bonds must be capable of covering claims attached to the bonds. The EBA report 2016 recommends coverage requirements to be part of a common framework.
CBPP	The Covered Bond Purchase Programme, a programme originally instituted in 2009 by the European Central Bank to support a specific financial market segment by purchasing covered bonds. CBPP3 is the third and latest purchase programme, started in October 2014.

CEE	Central and Eastern European countries
CPT/conditional pass through	See "Bullet structures"
CRR	Regulation No 575/2013 on prudential requirements for credit institutions and investment firms (capital requirements regulation)
Dual recourse	The dual recourse secures the covered bond investor a claim on both the cover pool and the issuer.
EBA report 2014	EBA report on EU covered bond frameworks and capital treatment – Response to the Commission's call for advice of December 2013 related to Article 503 of the Regulation (EU) No 575/2013 and to the ESRB Recommendation E on the funding of credit institutions of December 2012 (ESRB/12/2), published July 2014
EBA report 2016	EBA report on covered bonds – Recommendations on harmonisation of covered bond frameworks in the EU, published December 2016
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
ECBC	European Covered Bond Council, created by the European Mortgage Federation (EMF) in 2004 to represent and promote the interests of covered bond market participants at the international level.
EMIR	Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories (European Markets Infrastructure Regulations).
EMS	Extendible Maturity Structures (see bullet structures)
ESN	European Secured Notes is as a dual-recourse financial instrument on an issuer's balance sheet applying the basic structural characteristics of covered bonds to two non-traditional cover pool assets - SME bank loans and infrastructure bank loans. ESNs are

	originally suggested by the ECBC, supported in the EP report and currently being examined by the Commission to assess the case for legislative action.
EP report	Report from the Committee on Economic and Monetary Affairs: Towards a pan-European covered bonds framework, adopted in June 2017
HTT/Harmonised Transparency Template	Template introduced by ECBC. Standardised, Excel-based form that issuers who have been granted the Covered Bond Label by ECBC use to disclose information on their covered bond programs.
LTV	Loan-to-value. The ratio between the loan and the value of the asset serving as collateral.
LCR	The liquidity coverage ratio (LCR) refers to the demands for highly liquid assets to be held by financial institutions to meet short-term obligations.
LCR Delegated Act	Commission Delegated Regulation (EU) 2015/61 to supplement Regulation (EU) No 575/2013 with regard to liquidity coverage requirement for Credit Institutions
Overcollateralisation/OC	The level of collateral exceeding the coverage requirement. Can be statutory or contractual (used to support the credit rating treatment of the bonds).
Segregation of cover assets	The legally binding and enforceable arrangements establishing the existence and maintenance of a cover register and/or the transfer of the cover assets to a legally remote vehicle (an SPV) to ensure investors' access to the cover assets.
SME	Small and Medium (sized) Enterprises
Soft bullet	See "Bullet structures"
Solvency II	Directive 2009/138/EC on the taking-up and pursuit of the business of Insurance and Reinsurance

Special public supervision	A requirement in UCITS article 52 (4) demanding for the issuer of the covered bonds to be "subject by law to special public supervision designed to protect bond-holders". The demands for the supervision are not further defined in UCITS.
Substitute cover assets	Assets held in addition to the primary assets in the cover pool, typically represented by derivatives and other assets held for liquidity purposes.
UCITS	Directive 2009/65/EC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities