CROSS-BORDER BANKING ON THE TWO SIDES OF THE ATLANTIC: DOES IT HAVE AN IMPACT ON BANK CRISIS MANAGEMENT?

2017

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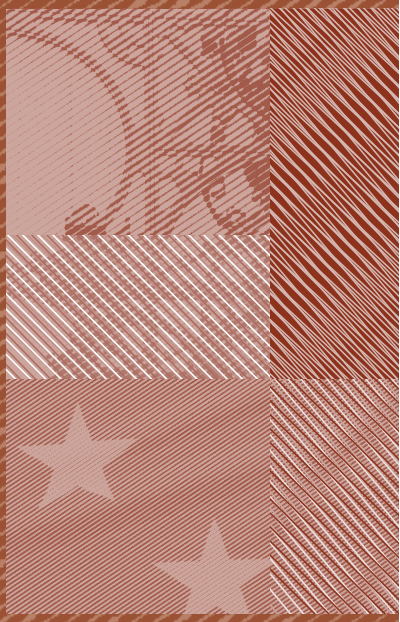

Documentos de Trabajo
N.º 1738

BANCO DE **ESPAÑA**
Eurosistema

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(*) The views expressed here are those of the authors and do not necessarily reflect those of the Banco de España, the Federal Reserve Bank of Atlanta, the Eurosystem or the Federal Reserve System. This paper was presented at the Banking Law Symposium on "Multinational Banking: Capturing the benefits and avoiding the pitfalls" London 9-10th September, 2015. The authors thank the participants for their valuable comments.

Documentos de Trabajo. N.º 1738
2017

ISSN: 1579-8666 (on line)

Abstract

In the US and the EU political incentives to oppose cross-border banking have been strong in spite of the measurable benefits to the real economy from breaking down geographic barriers. Even a federal level supervisor and safety net is not by itself sufficient to incentivizing cross-border banking although differences in the institutional set up are reflected in the way the two areas responded to the crisis. The US response was a coordinated response and the cost of resolving banks was borne at the national level. Moreover, the FDIC could market failed banks to other banks irrespective of state boundaries reducing the cost of the crisis to the US economy and the sovereign finances. In the EU, the crisis resulted in financial market fragmentation and unbearable costs to some sovereigns.

Keywords: banks, international finance, European Union, United States.

JEL Classification: G21, G28, G34.

Resumen

A pesar de los beneficios de la actividad bancaria transfronteriza para la economía real, los incentivos políticos para oponerse a su desarrollo han sido muy grandes tanto en Estados Unidos como en la UE. La existencia de una red de salvamento de carácter federal no es suficiente para incentivar la actividad bancaria transfronteriza, aunque las diferencias en el marco institucional están reflejadas en la forma en la que Estados Unidos y UE respondieron a la reciente crisis. En Estados Unidos, la respuesta fue coordinada, y el coste, soportado a nivel federal. Más aún, la FDIC pudo encontrar bancos que adquirieron bancos en crisis en otros Estados. En la UE, la crisis financiera fragmentó el mercado bancario y tuvo un coste insoportable para algunos Estados.

Palabras clave: bancos, finanzas internacionales, Unión Europea, Estados Unidos.

Códigos JEL: G21, G28, G34.

1 Introduction

The Great Financial Crisis and its aftermath played out differently in the United States (US) and European Union (EU), especially in the Euro Area. At the start of the crisis that began in 2007, both the US and EU took creative steps to deal with liquidity problems in the banking system but were slower in responding to most banks' solvency issues. However, their approach to solvency issues diverged after the failure of Lehman Brothers Holdings Inc. in September 2008. Why was the response to the crisis so different in the EU compared to the US? One important difference between the two is that the US entered the crisis with a banking system that was largely integrated across state lines, whereas the EU entered the crisis with a banking system largely separated along member state lines. That is, the US had largely eliminated the barriers to interstate banking, a substantial fraction US banking assets were held by interstate banking groups, and all significant commercial banks were subject to federal supervision and were covered by a federal safety net. As a result, the federal authorities could aggressively deal with banks´ losses without having concern about either the economic or political consequences associated with their distribution across the states.

In contrast, the EU entered the crisis with a nationally oriented banking system in which barriers to cross-border banking were both of a political and economic nature. EU banking systems were overwhelmingly dominated by home country banks. Additionally, prudential supervision and bank safety net remained national responsibilities. The reliance on national governments for deposit insurance created incentives to delay loss recognition and created some fiscal issues in countries where delay was not possible.

This paper analyzes banking integration in the US and EU and how it has impacted the response to the crisis. The next section discusses the progress made in the US and EU prior to the 2007 Great Financial Crisis in developing an integrated banking system. The third section discusses the experience of the US and EU during the crisis. The fourth section evaluates the likely impact of recent policy changes on the future cross-border banking with largest focus being on developments in the EU where institutional changes have been most dramatic. The last section offers some concluding thoughts.

2 Before the Great Financial Crisis

The EU and US were alike in that both had banking systems that were fragmented along state lines at one time. However, the EU and US were different in two fundamental ways that influenced the way in which they integrated their banking systems.

First, the EU started with a goal of creating a single banking market where banking groups could operate widely across state boundaries.[1] The US was not guided by a long-run commitment to any single goal. An important consequence of this difference is that the EU has sought to attain integration as soon as was practically possible considering all of the obstacles whereas the US gradually evolved towards an integrated banking system in response to a variety of developments. The second difference is that the US could induce banks to voluntarily accept federal supervision by offering an enhanced federal safety net in return. Lacking a central fiscal authority, the EU instead started the process by trying to support banking integration via deregulation of cross-border branching and harmonization of banking regulation.

2.1 United States

Direct federal supervision of banks began with the creation of the national banking system in 1863. Next the creation of the Federal Reserve System in 1913 extended federal supervision to those banks that sought access to the Federal Reserve's lender of last resort facilities. The final step was the creation of the Federal Deposit Insurance Corporation (FDIC) in 1933. Some states had operated state level deposit insurance systems but these systems proved unable to cope with the losses in the 1930s.[2] The creation of the FDIC shifted responsibility for losses to the federal government but also brought most small banks under federal supervision.

Despite the integration of the supervisory and safety net systems, the US entered the 1980s with a banking system that was largely fragmented along state lines. However, gradual changes in technology meant those who had most opposed cross-border banking received fewer benefits from continuing restrictions according to Calomiris and Haber (2014). As a result the political climate changed, and the limits on interstate banking were relaxed in almost all states starting in 1985.

Interstate banking movement continued to progress through the late 1980s and early 1990s such that pressure grew for the federal government to further deregulate and rationalize interstate bank operations.[3] The result was the 1994 Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 (IBBEA), which repealed most of the barriers to nationwide banking. However, IBBEA also included two quantitative limits on banking takeovers, an acquirer could not control more than 10 per cent of the nation's total deposits or more than 30 per cent of any state's deposits after an acquisition.

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1 Analysis of cross-border banking in the U.S. and EU both suggest that cross-border banking is associated with significant economic benefits. Tara Rice and Philip E. Strahan's (2010) conclude that, in the US, small firms in states that were more open to branching paid lower interest rates and were more likely to borrow from banks. Thus the effect of less fragmentation appears to improve credit availability and the cost of capital. In the EU, Bonaccorsi di Patti and Gobbi (2007) show that bank consolidation improves the availability of credit for corporate borrowers.

2 United States Federal Deposit Insurance Corporation (1984, Chapter 2).

3 See Savage (1993) for a summary of the state-by-state status of interstate banking and branching laws.

Table 1 shows the number of completed intrastate and interstate mergers by year of announcement over the period from 1995 to 2006.[4] Although the number of mergers and acquisitions drops from more than 400 per year in the late 1990s, it remains a relatively robust average pace of over 200 per year pace in the 2000s. An average of almost one-third of all transactions was out-of-state transactions in which the home state of the buyer was different from the home state of the seller.[5] Garcia (2009) finds that as of 2006 that cross-border deposits (deposits in office where the headquarters of the bank is located in another state) accounted for 37 per cent of total deposits in the US.

Table 1: US Mergers announced and completed 1995-2006 By announcement year

Year	Total	In-State	Out-of-State
1995	435	291	144
1996	435	289	146
1997	439	280	159
1998	461	299	162
1999	328	213	115
2000	246	161	85
2001	241	169	72
2002	199	143	56
2003	246	179	67
2004	252	176	76
2005	255	179	76
2006	278	183	95
Total	3815	2562	1253

SOURCE: SNL Securities.

Table includes only whole bank purchases.

2.2 EU

Although the EU policy goal has historically been a single market in banking services, integration of the prudential supervision and the safety net at the EU level faced political opposition prior to the crisis. As an alternative, the EU sought to create the conditions that would allow the formation of pan-European banking groups.

2.2.1 ORGANIC GROWTH IN THE FORM OF BRANCHES

Efforts to promote an EU internal market in banking services received considerable momentum from the mid- 1980s onwards. A potentially major step towards the creation of a single banking market came with the adoption of the "single passport" (Second Banking Directive, 1977) under which a bank authorized to operate in one EU member state was authorized to open branches subject to home-country supervision and provide services in all other EU member states without further authorization. The "single passport" provided an ingenious method of promoting cross-border banking and creating the potential for competition among national supervisors. However, competition along prudential lines was deliberately constrained, by the

4 See Rhoades (2000) for an in-depth analysis of bank mergers in the U.S. from 1980 to 1998.

5 Out-of-state transactions also include cases where the buyer headquartered in a different state is expanding its existing operations the seller's home state.

Second Directive, which fostered a generally more level playing field by calling for the harmonization of important safety and soundness regulations, including capital adequacy.[6]

Despite the potential advantages to banks of opening new cross-border branches, *de novo* branching never achieved sufficient scale to create a single market for financial services. An important part of the problem was that *de novo* branching is a less effective way of entry than the acquisition of an existing bank in that market because banks require knowledge of their local markets that is best obtained from experience in that market. However, entry via acquisition of an existing bank requires the approval of the host country supervisor even if buyer's plan is to operate the acquired bank as a branch of the acquiring bank.

2.2.2 ORGANIC GROWTH IN THE FORM OF SUBSIDIARIES

In 1998, the launching of the euro, gave added importance to the creation of a single financial market. In turn, the euro was a tool of financial integration. One year later, the Financial Services Action Plan set the goal of fully integrating the EU banking system by the year 2005. Despite these developments, cross-border M&As were just a fraction of the total (see Graphs 1 and 2 in Walkner and Raes, 2005). Table 2 shows that almost all merger and acquisitions were among domestic banks in the EU in the late 1990s. Cross border merger and acquisitions increased after the inception of the euro in the 2000s. Domestic takeovers were over 3 times as common in the EU after 1999, whereas they were only twice as common in the US.

Table 2: EU Mergers announced and completed 1995-2007

Year	Total	Domestic	Cross border
1995	44	43	1
1996	32	31	1
1997	34	28	6
1998	33	32	1
1999	40	36	4
2000	36	28	8
2001	21	16	5
2002	21	16	5
2003	21	17	4
2004	22	16	6
2005	21	12	9
2006	31	18	13
2007	24	18	6
Total	380	311	69

SOURCE: Thomson One Banker.

6 From the view point of financial stability, the regulatory distinction between significant branches and subsidiaries of international banks has been significantly blurred by the similar treatment of systemic branches and subsidiaries for the purpose of coordination among competent authorities including information sharing over the years in the EU.

One reason for the tendency to consolidate within national boundaries is that cross-border takeovers were often blocked by national supervisors. Member states had a political desire to create national champions and to protect their banks from external competition.[7]

Evidence that regulatory barriers was an important reason for the slow development of cross-border banking was supplied by the European Commission (2005). That study examined the extent of cross-border takeovers and found that it was proceeding more slowly in the financial sector due to regulatory and economic barriers to takeovers. Political interference and misuse of supervisory powers seemed an important regulatory barrier according to the European Commission study. Köhler (2010) shows that cross border consolidation in the EU banking sector is mainly limited by implicit government barriers. This author argues that implicit barriers arise from merger control if national authorities block cross-border takeovers during the merger review process for opaque concerns. EU policy makers provided an incomplete response to those accusations, issuing a Directive that aimed at establishing objective procedures and rules for the prudential assessment of acquisitions and increase of shareholdings in the financial sector.[8]

In addition to political economy considerations, financial performance helps explain the slow pace of cross border EU mergers and acquisitions. Hernando, et al. (2009) conclude that cross-border takeovers are more likely in concentrated markets. This seems to indicate that outside banks within the EU are attracted by high rents, which might be obtained in more concentrated markets.[9] Also slowing the pace of cross border acquisitions was a variety of regulatory issues that were not targeted at cross-border banking *per se*. For example, the lack of full harmonization of safety and soundness regulation (i.e. there were up to 150 options of national discretion only in the application of the Capital Requirement Directive) and differences in the supervisory approach raised the cost of operating in different countries. The lack of comprehensive regulation on bank crisis resolution (Garcia, et al, 2009) greatly reduced the potential for cost savings by integrating across national borders. Finally, the lack of incentives to reveal the true financial condition of the banks (Holthausen and Rønde , 2005) added to the cost and risk of engaging in a cross-border takeover.

Against this background, cross-border bank consolidation was far from leading to Pan European institutions before the Great Financial Crisis. In light of the difficulties of cross-border banking, Garcia (2009) finds that the assets of cross-border branches and subsidiaries grew very little from 12.2 per cent in 1997 to only 18.2 per cent in 2006.

2.3 Comparison of integration

The differences between the US and EU in their supervisory system, safety nets and their respective authorization of cross-border movements are summarized in Table 3. This shows that the US had a fully developed federal supervisory system at the start of the crisis, whereas both of these resided at the national level in the EU. The harmonization process in the EU reduced some of the differences across member states creating a lower bound for safety and soundness, which still allows for considerable national discretion. The EU had early provisions

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7 For example, Italy opposed the acquisition of Banca Nationale del Lavoro by BBVA (Spain) (see http://ec.europa.eu/competition/mergers/cases/decisions/m3768_20050427_20310_en.pdf accessed July 2nd, 2015). The Netherlands's ABN Amro encountered difficulty in acquiring Italy's Antonveneta, but finally succeeded in 2005.

8 Directive 2007/44 /EC of the European Parliament and of the Council amending Council Directive 92/49/EEC and Directives 2002/83/EC, 2004/39/EC, 2005/68/EC and 2006/48/EC as regards procedural rules and evaluation criteria for the prudential assessment of acquisitions and increase of shareholdings in the financial sector. OJ 21.9.2007 (L 247).

9 Along similar lines, Köhler (2010) argues that consolidation in the EU banking system is driven by the desire to generate economies of scale and scope as well as X- efficiency gains though better management techniques and organization.

for both cross-border branching and acquisitions whereas these were only gradually deregulated in the 1980s and 1990s in the US. However, US banks moved quickly to exploit cross-border opportunities as they arose, whereas EU banks faced a variety of more subtle obstacles that inhibited cross-border activity prior to the crisis.

Table 3: Cross border banking EU vs US: Pre crisis period

	EU	US	Comments
Supervision	National	Federal (1864, 1914, 1933)	In the US, Federal safety net developed before cross border banking
Safety Net	National	Federal (1914, 1933)	
Cross border branching	Legally possible and fostered via "Single Passport" (1977)	Generally not permitted before IBBEA (1994).	
Cross border M&As	Legally possible but *de facto* limited by (i) local politicians and supervisors and (ii) limits to cost savings	Allowed by states starting in 1985 but often only on a regional basis. IBBEA (1994) removed most state restrictions but banned takeovers if the resulting group held ≥ 10per cent nation total deposits or ≥ 30per cent state deposits	In the EU, natural barriers (i.e. language, taxes, labor markets) limited the economic case of cross border banking

3 Crisis

Stark differences existed between the EU and US at the dawn of the crisis. The US had fully accepted cross-border bank with consolidated supervision and the safety net at the Federal level. In contrast in the EU, many national authorities resisted cross-border banking with prudential supervision and the safety net remaining national responsibilities.

3.1 United States

The US entered the crisis with two standard tools for addressing distressed and failing banks: takeovers before failure by healthy banks and resolution by the FDIC, which typically results in a post-receivership takeover by a healthy bank. The US also adopted the extraordinary measures of capital injections and liability guarantees to support the continued operation of distressed banks. The following subsections discuss the use of the standard and extraordinary tools during the crisis.

3.1.1 BANK MERGERS AND DEPOSIT INSURANCE

Table 4 shows that bank mergers, both with and without FDIC assistance, continued on average over 200 per year between 2007 and 2014. The only noticeable drop-off in mergers occurred in 2008 and 2009 during the worst part of the crisis in the US. The proportion of out-of-state takeovers also fell but remained over one-quarter of all takeovers.

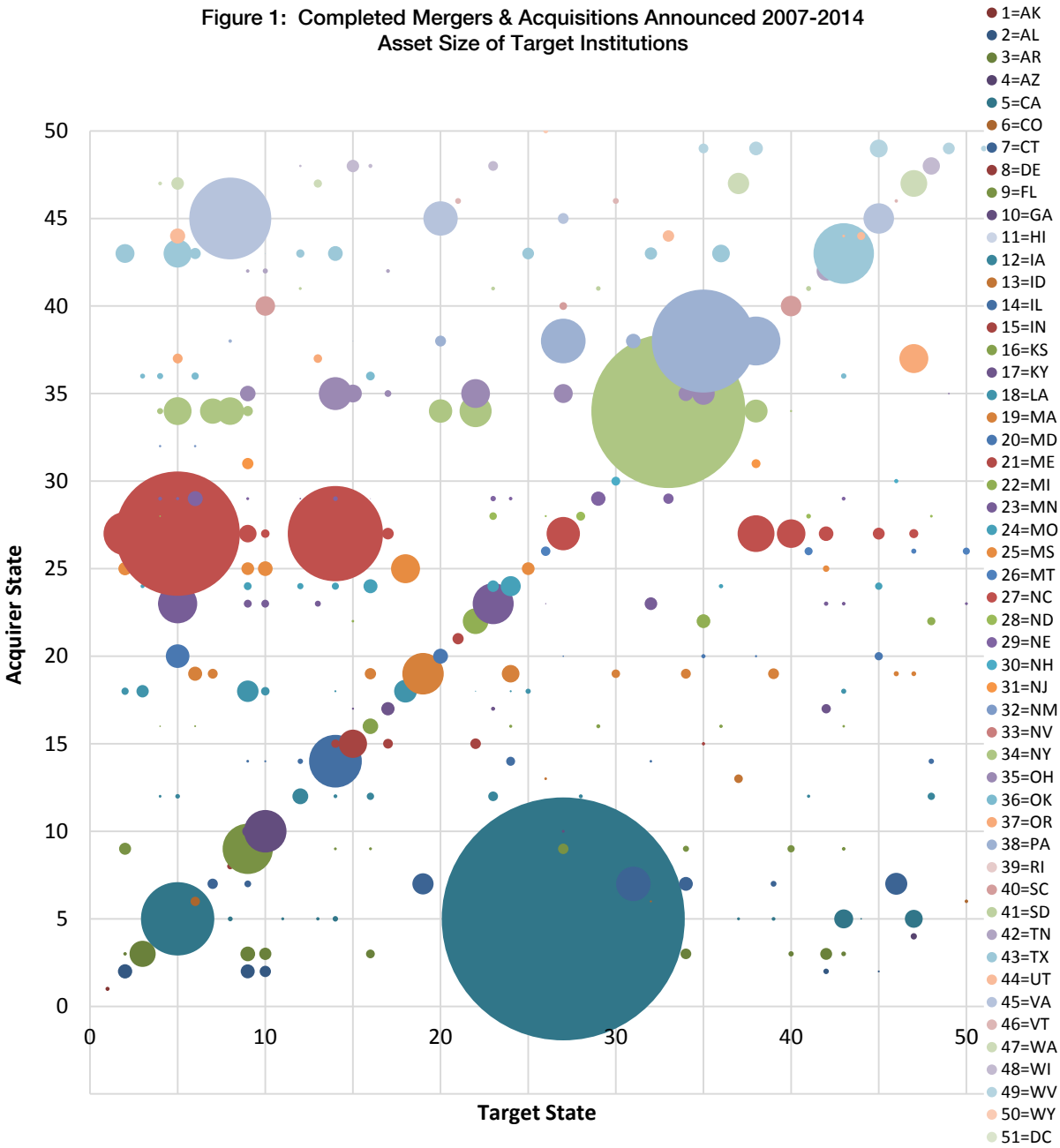
Table 4: Mergers announced and completed 2007-2014
By announcement year

Year	Total	In-State	Out-of-State
2007	266	203	63
2008	154	102	52
2009	199	137	62
2010	274	195	79
2011	223	165	58
2012	244	173	71
2013	233	166	67
2014	274	197	77
All years	1867	1338	529

SOURCE: SNL Securities
Table includes only whole bank purchases.

Although cross-border mergers fell as a proportion of all takeovers, the largest deals were out-of-state transactions. Figure 1 shows completed mergers by target and acquirer state between 2007 and 2014 with the size of the bubble corresponding to the cumulative size of all such target's (or targets') assets. Figure 1 shows a string of dots along the horizontal axis reflecting the high proportion of in-state transactions. However, the chart also shows many interstate transactions, including all five of the transactions where the target had more than 100 billion USD in assets.

Figure 1: Completed Mergers & Acquisitions Announced 2007-2014
Asset Size of Target Institutions



SOURCE: SNL Securities

Figure includes only whole bank purchases.

The ability of distressed banks to sell into a national or regional market before failure, and the FDIC's ability to market failed banks across state boundaries helped hold down deposit insurance losses, with the FDIC's losses from failures totaling only 77.5 billion USD. The provision of deposit insurance by a federal agency rather than 50 states reduced the impact of these failures on some states. However, the losses were not too large even when measured against state GDP. Table 5 shows the states with the largest cumulative resolution costs over the 2007-2014 period as a percentage of that state's 2009 GDP for all states with losses in excess of 0.5 per cent. The highest percentage cost was in Georgia, but even then the cumulative losses were less than 3 per cent of that state's 2009 GDP.[10]

10 The importance of federal risk sharing was greater in the 1980s. Krugman (2012) estimates that the FDIC's losses from resolving banks in Texas in the 1980s was about equal to 25 % of that state's gross state product.

Table 5: FDIC resolution from 2007-2014 by the headquarters state of the bank as a percentage of their respective state's 2009 gross domestic product.

State	FDIC Costs
Georgia	2.87
Alabama	2.71
Nevada	1.96
Florida	1.53
Arkansas	1.07
Utah	0.98
California	0.95
Kansas	0.87
Colorado	0.81
Illinois	0.76
Washington	0.61
Ohio	0.54
New Mexico	0.53

3.1.2 EXTRAORDINARY SUPPORT

In addition to the use of out-of-state mergers, another reason for the low deposit insurance losses is that the largest distressed banks received capital injections by the US Treasury under the Emergency Economic Stabilization Act of 2008. That Act created the Troubled Asset Relief Program (TARP) with a 700 billion USD fund to purchase of troubled assets. TARP funded the Capital Purchase Program and Targeted Investment Program which purchased bank capital.

The capital injections were larger than the FDIC's resolution costs. Table 6 shows the amount of capital injections by the headquarter state of the bank holding company relative to that state's 2009 GDP for every state in which the injection was at least 0.5 per cent of state GDP. Two states stand out in the Table 6, North Carolina with capital injections of almost 12 per cent and New York with injections of over 9 per cent.

Table 6: Total Capital Purchase Program and Targeted Investment Program capital injections by the headquarters state of the group as a percentage of their respective state's 2009 gross domestic product.

State	Capital Injections
North Carolina	11.96
New York	9.16
Minnesota	2.75
Alabama	2.21
Pennsylvania	1.80
Ohio	1.70
Connecticut	1.68
Georgia	1.59
California	1.50
Utah	1.29
Wisconsin	1.05
Virginia	1.02
Illinois	0.73
Delaware	0.71
Massachusetts	0.65
Tennessee	0.53

SOURCE: US Treasury, Troubled Asset Relief Program Transaction Report dated September 30, 2010, US Bureau of Economic Analysis.

Moreover, the capital injections understate the importance of federal support and cross-border acquisitions to New York and North Carolina in two ways. First, interstate banking allowed the sale of the failing North Carolina based Wachovia, (which had 800 billion USD in assets) to California based Wells Fargo in the second quarter of 2009. Second, the FDIC created the Temporary Liquidity Guarantee Program to provide guarantees for transactions accounts (Transaction Account Guarantee Program) and for senior unsecured debt (Debt Guarantee Program or DGP).[11] The additional amount of deposits guaranteed under the Transaction Account Guarantee Program is difficult to determine. However, data on the DGP show that Bank of America and the large New York banks took substantial advantage of this program. Bank of America's outstanding debt issued with a DGP guarantee as of March 31, 2009 was 16.7 per cent of North Carolina's 2009 GDP. Similarly, the guarantees for the four large New York banks (Citigroup, Goldman Sachs, JP Morgan Chase and Morgan Stanley) totaled 13.3 per cent of New York's GDP.

3.2 EU

The Great Financial Crisis reduced the risks sharing benefits and put a break on cross border bank consolidation (see Table 7).

Table 7: EU Mergers announced and completed 2007-2013

Year	Total	Domestic	Cross border
2007	24	18	6
2008	52	48	4
2009	38	35	3
2010	61	53	8
2011	19	19	0
2012	24	23	1
2013	25	22	3
Total	243	218	25

SOURCE: Thomson One Banker.

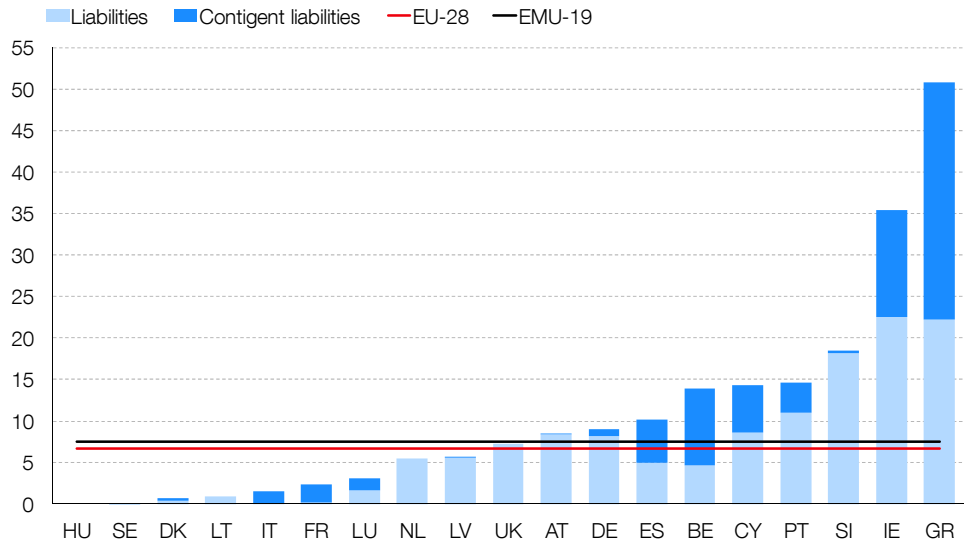
When it became clear that the existing safety net was insufficient to stop the crisis, national governments scrambled to support their national banking systems (Nieto, 2010). Early in the crisis, government support rarely took place in the context of formal reorganization and resolution processes but instead often encompassed recapitalizations of financial institutions via direct capital injections or asset relief transactions (acquisition of assets by the state and provision of guarantees on bank assets). Also, guarantees on long term bank debt, mostly of newly issued bank senior debt and roll-overs of banks' maturing debt aimed to further ease the solvent banks´ liquidity problems. As countries were adopting modern legislation on bank recovery and resolution, capital injections happened in the context of the application of resolution tools such as the bridge bank and the bail in allowing for public – private burden sharing of the financial costs of the financial crisis.[12] Figure 2 shows government support to the banking sector in the EU as a percentage of national GDP.[13]

11 The Temporary Liquidity Guarantee Program required the FDIC to invoke the so-called "systemic risk exception" to least cost resolution. See the U.S. Government Accountability Office (2010).

12 In July 2013, the Commission adapted State Aid rules for crisis banks to make sure that State support should be granted on terms which represent an adequate burden-sharing by those who invested in the bank before resorting to public money. See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:216:0001:0015:EN:PDF accessed 9 July, 2015.

13 Government liabilities have their origin in both liquidity and capital support to banks in crisis. Government contingent liabilities have their origin in guarantees on liabilities programs to banks in crisis.

Figure 2: EU Government liabilities and contingent liabilities



Coordination of member states government support among countries took place only *ex post* and it was led by the European Commission in the context of its State aid policy. The goal of the state aid policies was to foster an integrated financial market in the EU by limiting member state's ability to subsidize their domestic banks.

An alternative approach to resolving distressed banks was for its home government to sell a restructured bank or a bridge bank to another bank. These sales rarely promoted cross-border banking as the acquirer almost always came from the same member state

In the latter stage of the crisis, some bridge banks and restructured banks were sold to foreign banks even outside of the EU. For example, in Spain, there was only one case of an acquisition of a restructured bank by a foreign bank: Nova Galicia Banco – the result of the merger of two Spanish savings banks from the same region - was sold to Banesco, a Venezuelan bank in June 2014. The Bank of Portugal has also opened up bidding for Novo Banco –the bridge bank of Banco Espirito Santo.

Even banking groups with large cross-border operations were handled largely along national lines. The failure of joint reorganisation of Dexia resulted in separation of the group along geographical borders and not taking into consideration the coherence of business lines and costly bailout by the governments involved.

3.2.1 THE CREDIT TRANSFER MECHANISM AMONG SOVEREIGNS: PARTIAL MUTUALIZATION

The crisis aggravated fiscal conditions in some euro area member states (EAMS) to the point where the member state's ability to continue to meet its full borrowing needs in private markets became questionable. In response, the EAMS agreed to create the European Financial Stability Facility (EFSF) in May 2010 as a temporary financing mechanisms only to sovereigns and later adopted a treaty establishing the European Stability Mechanism (ESM) in September 2012 as a permanent mechanism that also envisaged the possibility of direct financing of crisis banks.[14]

14 The ESM raises funds by issuing money market instruments as well as medium and long-term debt with maturities of up to 30 years. ESM issuance is backed by the authorized capital stock of EUR 700 bill and the irrevocable and unconditional obligation of ESM Member States to provide their contribution to ESM's authorized capital stock.

The EFSF and ESM contributed to financial stability both by allowing borrowers to honour their existing obligations, including on bonds held in bank portfolios, and by providing the funding to recapitalize distressed financial intermediaries.[15] However, both the EFSF and the ESM were structured as loans to a member states for which the borrowing state was fully liable. The other EAMS are liable for losses only if the borrowing member defaults on the loan. Nevertheless, the guarantee of the other EAMS allows the EFSF / ESM to provide funds at lower cost to than would otherwise be available from private sources particularly in distressed countries.

3.2.2 CENTRALIZATION OF BANK SUPERVISION AND RESOLUTION

In June 2012, the negative feedback loop between sovereign and banking crisis was threatening the financial stability of the euro area. This threat encouraged the Heads of State and Government of the EAMS to agree on the centralization of bank prudential supervision and crisis resolution in the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM) respectively for the EAMS. The underlying economic rationale is that full coordination via centralization of banks' prudential supervision in the SSM and resolution in the SRM would result in the highest level of safety and soundness because only this approach allows for full internalization of potential negatives externalities of cross border banking (Nieto and Schinasi, 2007; Hardy and Nieto, 2011). Against this background, euro area public backstops such as ESM could absorb extreme tail risks of crisis banks, only after euro area banks are subject to the ECB prudential supervision in the SSM and to centralized resolution.

As a measure of last resort, the ESM has been entrusted with the possibility to recapitalize banks directly if a bank fails to attract sufficient capital from private sources and if the respective member state is unable to recapitalize it by itself.[16]

3.3 Comparison of crisis response

The pre-crisis differences in cross-border banking and centralization of official structures between the EU and US is reflected in how the two responded to the crisis as summarized in Table 8. The US which started the crisis with a centralized regulatory and safety net was able to respond to the stresses with a coordinated federal response whereas the EU was decentralized prior to the crisis and responded in a decentralized fashion. Similarly, whereas cross-border takeovers were an important part of settling large distressed banks in the US, large cross-border takeovers of distress banks was rare in the EU.

15 The EFSF provided loans to Greece, Ireland, and Portugal. Cyprus and Spain have borrowed through the ESM. Ireland, Portugal and Spain have exited their respective programs.

16 Capital will, as a rule, provided as Common Equity tier 1 capital, thereby establishing ownership rights for the ESM. A direct recapitalization by the ESM will only be available if it is the cheaper alternative to an ESM program for the country concerned.

Table 8: Cross border banking EU vs US: Crisis period

	US	EU	Comments
Type of banks affected	– Thrifts – Large commercial banks – Small commercial banks	– Savings banks – Large commercial banks – Small commercial banks	
Decision making structures	Centralized (LOLR, DGS)	Decentralized (ELA, DGSs)	In the euro area, the decision to centralize bank supervision and resolution was made at the peak of the sovereign-banking crisis
Public backstops	– Centralized – TARP to all SIBs – Ready before stress test	– Decentralized coordinated by Commission State Aid Policy – National backstops – Limited credit transfers (ESM)	– In some EU countries, public backstops resulted in a negative sovereign – bank crisis loop – In the EU, lack of adequate resolution framework (i.e. tools, private financing) increased losses –
Private solutions	– Acquisitions by banks located in other States often geographically distant – Some small banks liquidated	– Mostly within member states – Crisis resulted in market fragmentation	

4 Post-crisis

Both the EU and US resolved to undertake reforms to lower the probability of a future crisis, and reduce their costs to their economies and sovereigns' financial condition. Some of these reforms were requested by the G20 and are being coordinated by international bodies, including the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (Basel Committee, 2011). Others are being taken independently by the US and EU. Although the Basel Committee's and FSB's actions do not target cross-border banking per se, they will raise the cost to the largest banks of expanding their international operations.[17] As such, they will likely discourage banks at the margin from engaging in cross-border activity.

The two most relevant items for cross-border banking in the G20 regulatory reform agenda aim at ultimately dealing with the moral hazard issues: First, identifying, assessing and resolving globally systemically important banks (G-SIBs) in crisis and, second, dealing with the implicit subsidy due to the expectation of government support that systemic banks enjoy when they are in crisis because they are considered "too-big-to-fail" (TBTF).[18] The Basel Committee and FSB reforms require banks, especially large banks considered systemically important to hold more capital. [19] In addition to actions aimed at strengthening capital, the FSB has set an agenda aimed at reducing moral hazard risks by establishing a credible regime for resolving G-SIBs. As part of the regulatory agenda on G-SIBs resolution, the FSB is proposing that G-SIBs be required to meet minimum standards for Total Loss Absorbing Capital (TLAC), which include largely core capital excluding capital buffers but also unsecured liabilities up to a limit, which can be written down or converted to equity if the G-SIB is put into resolution (FSB, 2014).

Additionally, both the US and EU are taking a variety of measures which will affect the development of cross-border banking in their respective areas.

4.1 United States

Along the same lines of the FSB and Basel Committee regulatory agendas, the post-crisis financial regulatory agenda in the US has been dominated by a desire for safer, easier to regulate and easier to resolve banks. No significant challenge has arisen to interstate banking, the federal role in bank supervision or the provision of the safety net at the federal rather than state level.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA) includes a variety of prudential measures designed to limit the size of banking group's size, make banks safer and make them easier to resolve. The provision with the most direct impact on cross-border banking is Section 622 of DFA which generally prohibits banks from acquiring another firm if the resulting company would have more than 10 per cent of aggregated national liabilities.[20]

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17 Cross jurisdictional activity is one of the indicators used by the Basel Committee to gauge the systemic importance of banks (Bank for International Settlements, 2014). In the euro area, banks that operate in two or more countries are considered "significant" and placed under the direct supervision of the ECB.

18 This is the potential that authorities are compelled to save an institution as a whole given its size and importance to the functioning of the financial system, complexity, and degree of interconnectedness.

19 The FSB has been publishing a list of G-SIBs according with the BIS methodology since 2011.

20 An exception to this limit is provided in case of the acquisition of a failing firm. The Federal Reserve regulation implementing Section 622 is 12 CFR 251.

DFA also provides that all bank holding companies with assets greater than 50 billion USD be designated as systemically important. Designated banks are subject to heightened prudential requirements. For example, these banks must conduct an annual stress tests which effectively results in their being required to maintain a significant capital buffer beyond that mandated by the capital regulations.

DFA took two important steps with regards to bank resolution. First, Title I of DFA authorized FDIC resolution of systemically important nonbank financial firms (including bank holding companies) in circumstances where such resolution was deemed necessary to prevent or mitigate the adverse impact of the firm's bankruptcy on the financial system. Second, Section 165(d) of DFA requires every systemically important bank develop a plan for its own orderly and rapid resolution in bankruptcy during a time of stress. The resolution plans must be approved by the Federal Reserve and FDIC. If a bank submits a deficient plan and fails to cure the deficiency in a timely manner, the Federal Reserve and FDIC may mandate more stringent capital requirements, restrictions on the company's activities or even require divestiture of operations.[21]

The provisions of DFA targeting systemically important banks are not intended to discourage cross-border banking per se. However, the requirements will tend to discourage banks from becoming larger. Additionally, the ban on acquisitions resulting in a bank with more than 10 per cent of national liabilities will make it difficult for to build a nationwide bank with a substantial presence in all major markets.

The Section 165 of DFA requirement that banks with assets greater than 50 billion USD be subject to heightened requirements also applies to banks whose parents are headquartered outside the US. In order to implement this provision, the Federal Reserve requires that foreign banking firms with assets greater than 50 billion USD (excluding the branches and agencies of a foreign owned bank) form an intermediate holding company for their US subsidiaries. This intermediate holding company will then be subject to prudential requirements similar to those imposed on domestically headquartered systemically important holding companies. These requirements will raise the cost of operating in the US by foreign banking groups, likely reducing their scale.

Thus, the US has taken a variety of actions that are likely to impact the extent and nature of cross-border banking. The likely results of these actions are that the biggest banking groups will be smaller and less geographically diverse.

4.2 European Union

Different from the US, centralization of bank supervision (SSM) and crisis resolution (SRM) were the result of a political decision in the euro area when the banks crisis compromised the credit standing of the sovereign in some EAMS.

4.2.1 HOW CAN CENTRALIZED BANK SUPERVISION AND RESOLUTION FACILITATE CROSS BORDER BANKING IN GENERAL AND MERGERS AND ACQUISITIONS IN PARTICULAR?

In the SSM, the ECB is assigned the ultimate responsibility for the effectiveness and consistency of bank supervision in the participating members, the EAMS. Centralization of supervision eliminates two perverse incentives: (a) not to reveal the true financial condition

21 The Federal Reserve regulations implementing this provision are 12 CFR 243.

of banks and (b) national bias on supervisory decisions (e.g. forbearance on bank investment decisions on national sovereign debt).

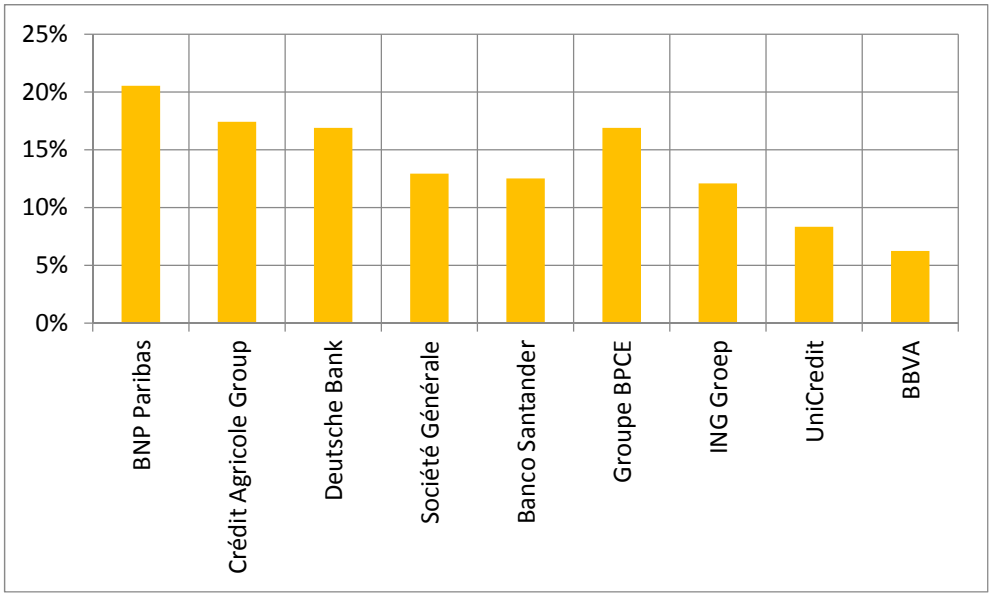
The SRM contains three elements: centralized resolution in a single authority (Board); a single set of resolution powers and tools as defined in the Bank Recovery and Resolution Directive; and a Single Bank Resolution Fund (SBRF), which provides mutualized private financing of bank resolution tools. The Board is responsible of finding "private solutions" via acquisitions of crisis banks in the context of resolution.

Centralizing the assessment of mergers and acquisitions both in normal situations under the ECB (SSM) and crisis situations under the Board (SRM) will potentially facilitate the sale of banks across the euro area market before failure. Supervision strategies, such as protecting national champions should no longer play a key role since the decision maker will be the ECB (supervision) or the Board (resolution) although the information advantages should be recognized.

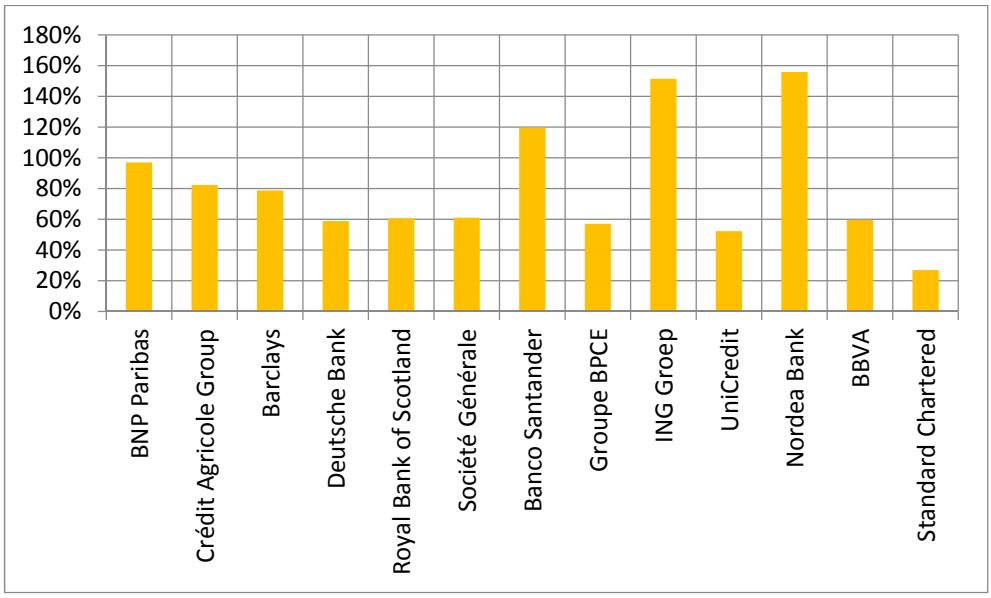
As national borders should matter less with regard to bank supervision and regulation, this will simplify cross-border activities facilitating economies of scale. Diversification of banks´ risk profiles is also expected from mergers and acquisitions between banks in different geographic areas, which would result in banks that operate in several EAMS. Also, large cross border banks´ size will not be compared to their home country national but to the euro area GDP because they will be euro area banks under the SSM and the SRM. Figure 3 shows the relative size of the euro area G-SIBs to the euro area GDP (Panel A) and to their national GDP (Panel B). However, it should be noted that these benefits should be measured against the costs of having larger institutions, which are TBTF. Figure 4 shows government support including contingent liabilities received by recipient banks in the EU countries measured in terms of their national GDP and euro area GDP.

Figure 3: Relative size of the large euro area banks (G-SIBs)

Panel A compared to the euro area 2014 GDP (per cent)

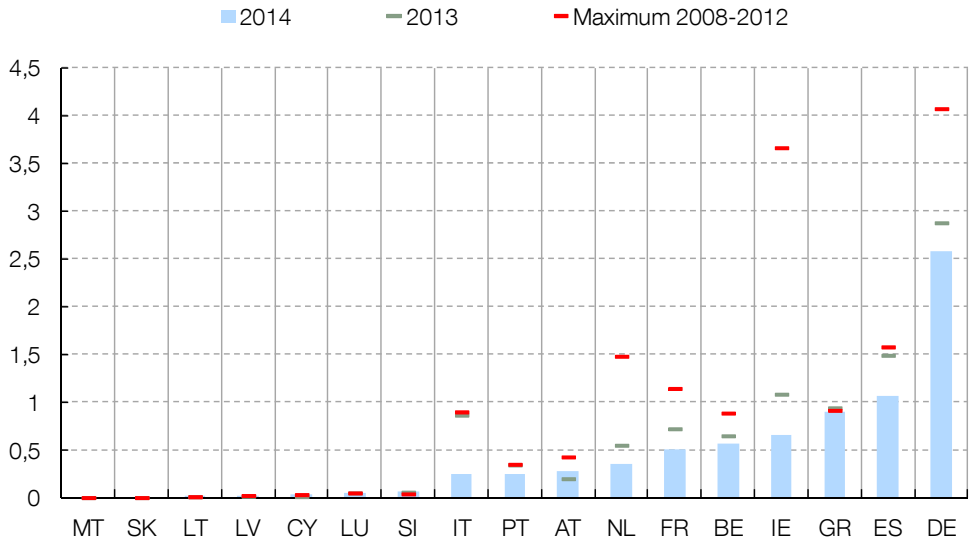


Panel B compared to their national GDP (per cent)



SOURCE: Eurostat and Bankscope.

Figure 4: Government support (liabilities + contingent liabilities) received by recipient banks in the EAMS measured in terms of the euro area GDP (per cent)



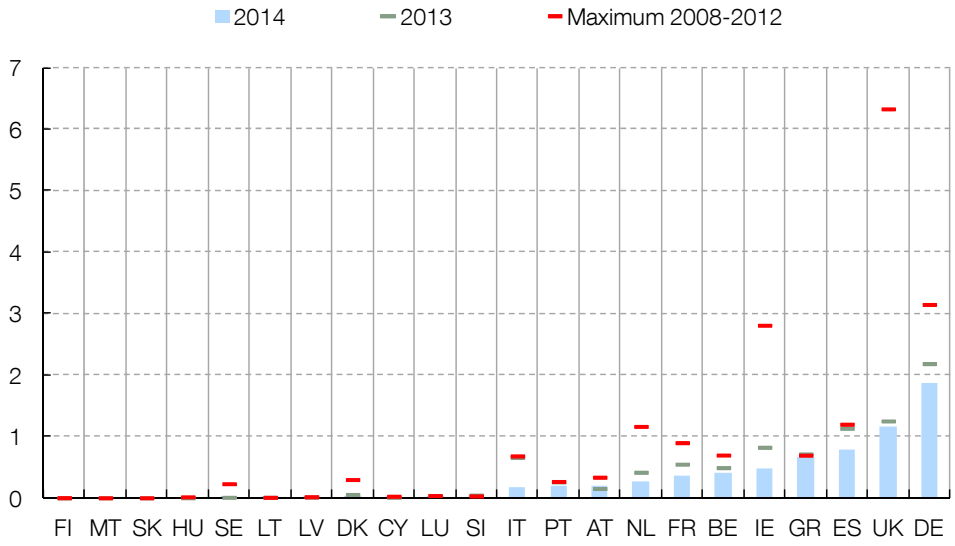
SOURCE: Eurostat.

4.2.2 THE CHALLENGES TO THE FULL DEVELOPMENT OF CROSS BORDER BANKING:

The full development of cross border banking is a desirable policy objective and the Great Financial Crisis made it clear that additional financial integration is needed to avoid a reversal of the EMU (ECB, 2015). Against this background, the full development of cross border banking faces challenges posed by the scope of SSM and SRM limited to the EAMS. The extension of the benefits of centralized supervision and resolution to the entire EU beyond the EAMS should be assessed, in particular, benefits related to the mutualisation of the private and public financing of bank crisis resolution. However, mandatory extension of the SSM's scope is for the

time being unrealistic. Figure 5 shows government support received by recipient banks in the EU countries measured in terms of the EU GDP.

Figure 5: Government support (liabilities + contingent liabilities) received by recipient banks in the EAMS measured in terms of the EU GDP (per cent)



SOURCE: Eurostat.

Even limited to the euro area, the development of cross border banking faces also challenges posed by the sufficiency and credibility of both private (Single Resolution Fund –SRF–)[22] and public (ESM) backstops to break the sovereign-bank loop. More specifically, the intergovernmental nature of the agreement on the functioning of the SRF, including the design of backstops, which are limited in quantity and subject to a cumbersome decision process, raises questions about drawbacks on the benefits of the centralization of bank supervision in the SSM for limiting forbearance as well as the financial costs of bank resolution (Nieto, 2015). Also, the advancement of ESM funds is subject to a number of cumbersome conditions and decisions that require consent in the ESM Board of Governors. Consequently, the sovereign-bank-nexus will be weakened rather than broken. As a result, private borrowing costs rise with the sovereigns. This is procyclical and it amplifies fragmentation of financial markets as well as volatility.

Another important challenge for cross border banking derives from the incomplete design of the banking union. National authorities are responsible for the provision of liquidity of crisis banks in the form of Emergency Liquidity Assistance (ELA) and deposit insurance (DGS) since national tax payers bear the ultimate credit risk.[23] The financing of banking crisis is still in the process of being completed in the euro area and although negative spillovers are expected to be less likely with centralized bank oversight including during resolution, they cannot be fully ruled out under existing arrangements. Such negative spill overs pose a threat to the full development of cross border banking.

22 The SRF is funded by fees paid by banks of the euro area with the single aim of financing resolution tools (i.e. bridge bank, asset management vehicle), not to cover losses of the restructured bank.

23 Centralization of ELA demands a common fiscal authority, which backs the potential credit losses of the central bank. In turn, the centralization of DGS demands a fully harmonized bankruptcy law and a common fiscal authority.

5 Conclusions

The political incentives to oppose to cross-border banking can be very strong for a very long period of time. Overcoming such political incentives is rather difficult until circumstances change in a way that weakens such incentives. Even a federal level supervisor and deposit insurer is not by itself sufficient. Either state opposition must fade away or the federal level must be committed to allowing or even incentivizing cross-border banking. As the US experience shows, cross-border integration is a difficult task that takes time in spite of the measurable benefits to the real economy from breaking down the barriers to cross-border competition. Even 20 years after the start of consolidation in the US, large banks were still looking for opportunities to expand into new markets.

The EU is pursuing its objective of a single market for financial services. Pre-crisis efforts to do so via the single passport and regulatory harmonization proved insufficient to bring about an integrated banking system. After the crisis the EU adopted a SSM and SRM, in part to facilitate the move towards bank market integration. Both the SSM and the SRM within their respective mandates should be able to overcome any remaining national resistance to cross-border banking. However, the development of a mechanism for resolving failing banks is still work in progress. State level insurers are not viable inside a monetary union because the liquidation of small banks could overwhelm the capacity of national DGS. However, mutualisation of DGS requires full harmonization of bankruptcy laws because the effectiveness of the bank liquidation process will have an impact on the financial situation of the DGS over which insured depositors have a legal claim. Also, it demands a common fiscal authority ready to provide public backstops when necessary.

Given their experiences during the crisis, both the US and EU have developed a greater importance of the supervising and resolving large banks as shown in Table 9. Both are taking steps designed to address these difficulties, some of which impose costs that increase with bank size, which should at the margin discourage cross-border operations. Given that the barriers to cross-border banking are likely to fall, the EU should consider what sort of banking structure would provide the best combination of an integrated financial system and a financial system in which the banks are neither too large to supervise nor too large to safely fail.

Table 9: EU vs US: post crisis safety net and supervision

	US	EU	Comments
Safety Net	– Federal (unchanged)	– Centralization bank supervision (SSM) and resolution (SRM) cum limited mutualization of resolution funding – Member states are responsible for DGS and ELA	Centralization only EU EAMS EU non EAMS fully responsible for supervision, DGS and ELA
Scope	– Banks – Systemically important non-credit financial institutions	All credit institutions (mixed) financial holdings and investment firms	US: Systemically important non-credit financial institutions included by the DFA
Governance	Shown the ability to make quick decisions in a crisis	Cumbersome decision making and incentive structure not fully aligned	US involves several parties including the President in the decision
Regulation of G-SIBs	– Meets or exceeds FSB and Basel Committee objectives of limiting G-SIBs implicit subsidy.	– Follows FSB and Basel Committee objectives of limiting G-SIBs implicit subsidy. – EU is a single jurisdiction	

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