**Circulating financial innovation: new knowledge and securitization in Europe**

Research in economic geography has provided a critical examination of securitization’s role in the recent global financial crisis. Building on earlier studies which interrogated the development of US securitization, contemporary research has explored how securitization has been adopted in different political economies. Although these novel studies have begun to highlight the geographies of securitization, our knowledge of the historical spread of securitization remains underdeveloped. This paper seeks to address this issue by exploring how securitization emerged within different European financial spaces. In doing so, the paper examines the cases of France, Spain and Italy to identify how securitization circulated through space and across communities of practice, facilitating the co-creation of new knowledges. The paper provides deeper insight into how securitization became established within European financial centres throughout the 1990s, shaping contemporary financial networks and the spread of the credit crunch.

**Keywords:** Securitization; communities of practice; financial geographies; innovation; financial networks

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1. **Introduction**

Since the unfolding of the global financial crisis (GFC), researchers in economic geography have turned to focus particular attention on securitization in an attempt to unravel its role in the (mis)management of risk and its effects on national economies. Securitization, a term used almost exclusively by financiers prior to the crisis, became a key topic of study, with researchers keen to uncover how capital market intermediaries connect consumers to global financial markets. Securitization can be viewed as a process where revenue streams from a pool of assets are bundled together through financial engineering to create a range of bonds bearing different levels of risk and return (Langley 2006). The assets used are often residential mortgages, but can include any asset which produces revenue, from consumer debt to infrastructure. Prior to the GFC, securitization was used widely by lenders with the aim of reducing capital adequacy requirements, re-selling assets at competitive prices, and redistributing risk (Leyshon and Thrift 2008).

Studies of securitization have provided useful insight into the operation of contemporary economies and the roots of the GFC (Gotham 2006; Langley 2006; Wainwright 2009; Bassens 2012; Aalbers et al 2011). However, even during the economic recovery, securitization markets have been active, with governments keen to stimulate new securitization transactions to fund economic growth (Bank of England/European Central Bank 2014). This is perhaps unsurprising, as although securitization was at the centre of the recent GFC, it was previously involved in economic downturns in the 1990s in the UK and US (Wainwright 2009; Johnson et al. 2002), but bounced back after further innovation and redevelopment.

While securitization research often focusses on its failures, particularly within US subprime markets (Gotham 2006; Immergluck 2009), a historical perspective reveals how securitization has been used in entrepreneurial ways, undergoing waves of incremental innovation across space (Bassens et al. 2012; Wainwright 2009; Montgomerie 2006). For example, securitization hybrids have been used to restructure intellectual property rights (Borod 2005) and shipping assets (Kasten and Seil 2009). Although studies into the geographies of securitization have continued to grow, there are still a series of prominent gaps in this research field. On the one hand, progress has been made in developing more critical analyses of securitization, moving beyond the functional studies of practitioners and economists (cf. Davidson at al. 2004). This has enabled geographers to better understand the economic and social effects of securitization (Montgomerie 2006; Langley 2006). On the other hand, with the exception of a few studies, the historical and social contexts of securitization and its evolution across space has been largely neglected (Aalbers 2009a; Aalbers et al. 2011; Bassens 2012; Wainwright 2009).

More recent work by Thiemann (2012; 2014) has built upon these critical narratives further, to provide novel analysis into the regulations which shape the accounting rules and regulations which support securitization in Europe. In doing so, Thiemann has demonstrated that although attempts have been made to harmonise international accounting standards and regulation to protect against the abuse of off balance vehicles and to provide greater financial resilience, the rules have been interpreted and implemented in national spaces, which reflect their legislative legacies (Thiemann 2012). This ensured that securitization is shaped by a variety of different rules across Europe, leading to the development of a diverse series of securitization structures. This variegation of securitization affected how widely it was adopted in different spaces, and in turn, how widely specific European economies were exposed to the GFC. Despite Thiemann’s contributions, further study is needed to provide a historical view of the institutional spaces in which securitization developed, to see how national social norms and banking structures, in addition to regulation, affected the variegation of securitization, and ultimately how this led to differentiations in exposure to the fallout from the GFC.

This is important as these underlying spaces had a strong influence on how new securitization knowledges were created, to make securitization compatible with financial spaces outside of the US. While research has focussed on the transfer of securitization from the US to the UK and emerging markets (Bassens 2012; Wainwright 2009), this paper seeks to provide additional insight into how knowledges and concepts emanated from the US to continental Europe. In doing so, the cases of France, Spain and Italy, are used to provide a spatio-historical narrative which provides insight into securitization spread. Specifically, this paper has three key aims. First, it provides insight into how securitization models and knowledges were reshaped and co-created to become compatible with new political economies. Second, the paper highlights how existing regulations created barriers to the adoption of securitization, requiring government intervention to support the introduction of securitization by financial institutions. Third, it provides specific narratives as to how securitization travelled from the US into France, Spain and Italy.

The paper is structured as follows. Section 2 examines research which explores the role of communities of practice (CoP) and how knowledge is created in particular spaces. In doing so, the paper highlights how these literatures can be used to investigate how knowledges are created in particular locations to create new securitization innovations and models. This section also outlines the methodology. Section 3 investigates the contexts in which securitization developed in France, Spain and Italy, to gain insight into how it was adapted to become compatible with these political economies. In drawing attention to the variegation of securitization, new light is shed on the importance of political elites in facilitating regulatory change which enabled securitization to operate. The final section concludes the paper and sets out avenues for future research.

**2. Knowledge networks and communities of practice**

*2.1 Spatializing securitization*

Geographical research has documented how securitization emerged in the US before becoming intimately entwined in the bundling and miss-selling of subprime mortgages (Gotham 2006; Immergluck 2009; Langley 2008). These studies have offered spatially sensitive narratives, which have also highlighted how securitization is not a stable entity, but a wider entanglement of technologies and knowledges that need to be reconfigured to accommodate local institutions, whether they be legal, social (Wainwright 2009; Aalbers et al. 2011), or religious (Bassens et al. 2012). Despite these advancements, the geographies of securitization literature remains in its infancy. One particularly stark gap which requires scholarly attention is our limited knowledge as to how securitization as a concept and technology travels between global financial spaces. Existing work has increasingly placed securitization within spatial and historical contexts, but our understandings as to how the idea of securitization was initially transferred to new financial spaces before being adapted and implemented is limited.

The first model of securitization was developed in 1977 by Salomon Brothers in New York (Lewis 1989), and was enabled by the ability of financiers to combine diverse knowledges from banking, law and asset management (Gotham 2006; Langley 2006), as the bonds had to manage the risks and characteristics of assets while complying with securities, tax, and real estate law. Compared to the heavily engineered securitizations of the 2000s, the first transactions were not dissimilar to existing corporate bonds, although the complexity of bond structuring and the demand for professional knowledges increased incrementally over time (Lewis 1989; Wainwright 2009). The technical knowledges in existing bond markets were complementary to securitization and formed an initial basis from which new knowledges were created. Once the US model for securitization was developed, it functioned as a template which was used to create new models within and outside of the US.

*2.2 Creating interdisciplinary communities for innovation*

Early research on innovations in finance have often viewed products as artefacts that are stable and can be easily transferred across space (cf. Jacque and Vaaler 2001). This is consistent with preliminary studies on innovation and knowledge transfer more generally, which claimed artefacts as objective and stable forms of knowledge, independent from social processes (Ibert 2007). This approach obscures the history of artefacts and innovation development, while hiding the complex social processes that enable a financial product to function and evolve, as markets and regulations change. Ibert (2007) has highlighted how geographical research has drawn inspiration from debates in organizational sociology (for example, Lave and Wenger 1991; Brown and Duguid 1991) to provide deeper understandings into the spatial production of knowledge. In this sense, perspectives from organizational sociology can be used to frame knowledge creation and circulation as a series of deeply intertwined social practices, (Ibert 2007), where knowledge is mutable, reflecting changing social practices and the requirements of professional elites.

This framing is useful in examining financial innovation, as Engelen et al. (2010) have argued that new financial products tend to be less radical, and form a chain of social relations, where key actors respond to new opportunities by improvising existing knowledges and technologies. For example, investment banks and bond-rating agencies did not have specialist securitization teams, terminologies or methodologies in London when the market began to emerge in the 1990s. Instead, these teams and knowledges evolved over time (Wainwright 2013), in response to growing market demand, making incremental changes to existing products that had been successful in other markets. However, incremental innovation is also driven by cost limitations. The costs from professional fees to a financial institution in developing a first securitization programme in the 1990s could range from $100,000 to $3million, whereas imitating a competitor’s previous deal would cut costs by 80%s (Jacque and Vaaler 2001). This led organisations like Citibank to deliver the same securitization programme across different European countries, making incremental modifications to suit new markets.

Securitization is often described as a product by market participants and economists. However, a more useful lens views securitization as a complex series of social relations, between borrowers, investors and markets, which are entangled and devised through a complex set of knowledges (Langley 2006; Bassens et al. 2012) to create new geometries of power, ordering, risk management and metrics. In addition to this, securitization transactions need to comply with laws and regulations which are often ambiguous, complicated further by market uncertainty, requiring these knowledges to change frequently while remaining mapped onto the institutional landscape of where the assets and transactions originate (cf. Gluckler 2005; Hall 2009; Bassens 2012). Subsequently, as with knowledge management in any professional services firm, financial concepts and models need to be experimented with and reconfigured to create hybrids that map onto the variety of capitalism in which they are created (Faulconbridge 2013).

Once the technique of securitization began to spread beyond the US, earlier knowledges of original US securitization models needed to be re-engineered through the co-creation of new knowledge, to become compatible with the new institutional landscapes in which they would operate, interfacing with regulations, market conditions and norms. This required interdisciplinary CoPs to develop to support new securitization markets, which stimulated the creation of new specialist legal and financial knowledges which are unique and compatible with a different institutional configuration of capitalism. As such, recent research on knowledge intensive producer services and the CoP literature provide a useful lens to understand securitization knowledge creation in different spaces through the creation of knowledge architectures and the circulation of expertise (Wenger et al. 2002; Grabher and Ibert 2006; Faulconbridge 2010; Hall 2009). These debates can assist in understanding how the flows of ideas, people and texts, enabled new locally-based securitization knowledge to be created, which enabled the spread of securitization through European economies.

The creation of new knowledge requires the participation of CoP from diverse professions to develop new innovations (Moodysson 2008). This necessitates new spatial cultures to be developed which cross disciplinary boundaries to enable experts from professions, such as law, finance and accounting, to exchange ideas and expertise (Grabher 2006; Grabher and Ibert 2006; Hall 2009). This results in the development of new terminologies, concepts and languages to represent and capture new social processes, metrics and understandings (Aldrich and Fiol 1994), which is consistent with the development of new securitization models and transactions outside of the US. The formation of CoP are bound by spatio-temporal relations, and consist of actors from diverse professions, often aligned to complete short-term project work (Faulconbridge 2006; 2010; Grabher 2006) where actors are removed from their usual professional or organisational settings to create new interdisciplinary project teams. The role of these heterogeneous teams is becoming increasingly important as the creation of new complex financial products requires a diversity of professional expertise (Hall 2007; Wainwright 2013).

*2.3 Trans(planting) local communities*

Research on project ecologies have emphasised how knowledge creation is fluid, although Faulconbridge (2006; 2010) has argued that there are few studies which examine how CoP and project ecologies are stretched across space, which is important when seeking to understand the spread of securitization. This is aligned with wider calls from geographers who have called for a more relational approach to examine how innovation and the co-creation of knowledge is practised across different regional and global spaces (for example, Bunnell and Coe 2001; Faulconbridge 2006; Jones 2008; Wainwright 2013; Cranston 2014). While tacit knowledge is circulated between organizations in local and global spaces (Barthelt 2004; Giuliani and Bell 2005), it still has to be reorganised and reworked when disseminated over long distances in the pursuit of innovation (Barthelt et al 2004; Gertler 2004).

Despite this research gap, scholars have noted how multiple professional service organizations collaborate on at-a-distance tasks as project ecologies (Grabher 2001). In this configuration, specialists complete short-term projects, (Faulconbridge 2006; Grabher 2006; Hall 2007) where they are temporarily removed from the organizations which employ them, to work more closely with other professionals (Grabher and Ibert 2006). During these project placements, embodied knowledge is circulated through these ecologies developing trust, mutual learning, collaboration (Grabher 2001; Hall 2009) and new knowledges. In the context of financial services, project ecologies often create incremental innovations, based on variants of existing financial products (Engelen et al. 2010), because new transactions are often modified to accommodate the diverse characteristics of securitised assets, new regulations and market demand. While the global circulation of professionals provides closer insight into the spread of knowledge, relational approaches have frequently failed to accommodate the complex narratives which connect different experts and professionals across space (Faulconbridge 2010). For example: researchers have highlighted how circulations of complex tacit knowledge and the development of new innovations frequently require different experts from CoP to meet face-to face, to modify and create new knowledge (Wenger et al 2002; Amin and Cohendet 2004), but it remains unclear as to how these groups are organised and which stakeholders lead the development of new securitization knowledge creation.

In order to address this lacuna, the paper will seek to understand how US generated knowledges of securitization were circulated and redeveloped by evolving communities embedded in diverse European institutional landscapes. This will provide a richer understanding of how knowledge management occurs across space and how established communities can evolve to create new markets.

*2.4 Methodology*

The paper uses the cases of France, Italy and Spain[[1]](#footnote-1) to understand how securitization knowledge developed in the US travelled to new financial spaces. Existing research has examined the use of securitisation in the UK and Netherlands (Wainwright 2009; Aalbers 2009a), but there is less systematic research on the development of securitization in other nation-states outside of the US. France has been chosen as it was one of the first European countries to develop a securitization transaction (1989) (Couret 1996). Similarly, Spain’s first securitization was in 1991 (Hermida 1996), while Italy witnessed a transaction similar to a securitization as early as 1985 (Jacque and Vaaler 2001). However, despite growth in the 1990s Spain and Italy’s securitization markets grew larger than France’s (Figure 1). To gain insight into the first securitization transactions and the contexts in which they were developed, archival research was undertaken by reviewing the British Library’s holdings of *International Financing Review* (IFR) from 1989 until 1995. IFR is a financial magazine aimed at securities professionals and contains details of forthcoming bond issues, including securitizations. It may be possible that some earlier transactions were not covered by IFR, but no alternative sources are available which recorded initial securitization transactions with more systematic coverage. Using this information, it was possible to determine when the first transactions began to appear, which financial institutions were involved and where they were based. Using this as a starting point, it was possible to access further grey literature to gain further insight into the relationships and locations of financial and legal services providers for these securitization deals (for example, *Moody’s*).

To provide further insight, information from recent semi-structured interviews were used to examine the development of new deals in financial centres. In total, 40 interviews were conducted with participants working in mortgage lenders, investment banks, law firms, bond-rating agencies, investors and trustee firms between 2007-2008. While these interviews were conducted in the UK, many of the participants had worked in financial services outside of the UK, or had worked on securitization transactions for European mortgage lenders, which were developed from London offices. Interviewing participants in London provided a common frame to analyse the different markets, especially as analysts and practitioners had a Europe-wide view of securitization markets and product development, given London’s role in structuring some transactions from the case countries, but also as it acts as a space for bond syndication. It is recognised that some nuanced insights into country specific trends may remain hidden with this approach, although the use of archival material provides additional support. The participants were identified by searches of the financial press (e.g. *Financial Times*) and by exploring the websites of financial organizations. Snowballing was also used to obtain access to individuals within the different departments of large financial organizations. The interviews were semi-structured to enable a flexible examination of the participants’ activities. The questions were also designed to explore the historical and spatial development of new securitization innovations and transactions. Each interview, lasting between 45 minutes and 2 hours, was recorded and transcribed, before being thematically coded and analysed to provide insight into the development of securitization knowledge.

**3. Diffusing and cultivating securitization in Europe**

*3.1 European securitization*

The development of securitization markets in Europe was an important milestone for financiers in the 2000s. Early securitization transactions were particularly popular as capital adequacy reserves could be circumvented (Blommestein et al. 2011), but securitization was later used more widely to transfer risk and raise funding from auto loans, infrastructure and credit cards, in addition to small medium-sized enterprise loans (SME), commercial and residential mortgages (CMBS and RMBS) and collateralized debt obligations (CDOs) (Aalbers 2009a; Wainwright 2009) (Figure 2). While this appeared to enhance the efficiency of financial institutions, it ultimately overexposed them to global liquidity risks as part of the GFC, causing many heavy securitizers to later fail (Aalbers 20009a). European securitization grew throughout the 1990s as additional participants entered the market, but volumes decreased after 2008 due to the global financial crisis (Figure 3). Interestingly, securitization was still used in the recovery by the UK and Netherlands where high property prices supported the need for securitization (Aalbers 2009b), but also as lenders could swap RMBS bonds for gilts through government liquidity programs.

Despite the role of securitization in the GFC, the Bank of England and EU began a consultation in 2014 to examine how securitization markets could be stimulated in order to unlock additional liquidity to enhance economic growth (Bank of England/European Central Bank 2014). It could be argued that this development reflects the increasingly entangled relationships of policy and financial elites which researchers have argued contributed to the GFC though regulatory failures (Froud et al. 2012; Engelen et al. 2012) This is a contradictory logic, as on the one hand, regulatory elites have been calling for a return to prudent banking practices to prevent future financial crises, but on the other hand, they have been calling a return to ‘business as usual’ through securitization, to assist the financial services sector in capturing fees. This has been further highlighted by a Europe-wide reluctance to introduce new regulation for fear of undermining the competitiveness of domestic banking sectors, which undermine the joint objectives of financial-political elites (Froud et al. 2012; Thiemann 2014).

[Insert Figure 1, 2 and 3 around here]

Despite the emergence of critical research into securitisation, contemporary studies have neglected securitization’s historical development and have underplayed the role of professionals in facilitating these new financial transactions. This is important, as although the concept of securitization travelled fairly easily through financial publications and professional networks, the absence of co-created knowledges to tailor the concept into specific local political economies was missing and would take time to develop. Existing markets began to co-create new knowledges through ‘local’ professionals in Paris, Milan and Madrid, and experts from international finance centres, including London and New York. As highlighted by a practitioner who had been involved in securitization across Europe since the 1980s, the initial knowledge base was limited, but began to develop from existing CoPs:

 “…in the early days, the beginning of the 90s, it was capital market guys like me, playing around with this new toy, structured finance…there were probably, topside, 30 people in the whole of Europe that knew what the hell securitization meant, now I’ve got a database of 20,000 odd people…it’s a very different business” (Ex-commercial Bank Director, July 2007)

Subsequently, new knowledge was developed by building securitization models incrementally out of existing bond market knowledge in Paris, Milan and Madrid (cf. Engelen et al. 2010) as the concept of US securitization was translated into new practices and frameworks that were compatible with local institutions.

*3.2 Emerging French securitization*

In contrast to other European countries, French financial institutions and the government quickly adopted securitisation. The main aim was to circumvent new Basel capital adequacy regulation, introduced in 1988, that required banks to hold liquid assets to cushion against loses from asset write-downs and to protect against insolvency. For example, cash reserves worth 8% of the value of a bank’s mortgage book would have to be retained, but as securitization removes assets from the balance sheet of a bank, it removes the need to hold capital reserves (Wainwright 2009). Subsequently, the introduction of Basel regulation created an incentive for French banks to experiment with securitization.

The creation of a new securitization market was not a radical concept for French financers, as there was already a substantial pool of capital market expertise in Paris which had developed around corporate bond and medium term note (MTN) markets since the 1950s (Leyshon and Thrift 1997). As Engelen et al. (2010) have argued, innovations in financial services are often developed through bricolage, so in this sense, Paris already had a high concentration of expert CoPs who were familiar with banking, law and finance, and had experience in creating project ecologies which stretched across global financial centres. In particular, France already had an active secondary mortgage market, developed in 1965 (Stone and Zissu 1994). After a restructuring in 1985, the Caisse de Refinancement Hypothecaire, a state owned bank, functioned as a conduit linking mortgage lenders to capital markets which was guaranteed by the state until 1988 (Stone and Zissu 1994). This ultimately functioned in a similar way to Freddie Mac and Fannie Mae in the US, to create a market for international investors, and also created a foundation of knowledge that practitioners would be able to alter to create new French securitization knowledges.

Until 1988, a US model of securitization was incompatible with the French political economy as it was not possible to transfer assets off balance sheet to a special purpose vehicle (SPV), rendering the strategy of circumventing Basel regulation unworkable. The introduction of Law no. 88-21 enabled the securitization of asset receivables (Couret 1996) through the creation of a new form of French SPV, known as a "*fonds commun de créances”* (FCC). Subsequently, it can be argued that the French government played a central role in developing new regulation to facilitate securitization, especially as it was the state-owned bank Caisse de Depots et Consignations (CDC) that launched the first French securitization in 1989 called Régions de France n°1 using loan receivables (Couret 1996). This highlights how regulatory and financial elites have not been divorced, but have been closely entwined and united in developing and promoting financial markets, long before the GFC, as opposed to being separate actors involved in practice and oversight (Froud at al. 2012; Engelen et al. 2012).

CDC used these new securitization knowledges on finance, law and company administration to develop a boutique advisory group called Eurotitrization which managed FCCs and provided securitisation advice to other French banks, a model which would also emerge in Italy and Spain, where local knowledge and advice would be provided to local lenders. CDC rapidly developed securitization knowledge and opened an office in New York to participate in US RMBS markets, just one year later (Aldrich et al. 2000), which enabled the circulation of rich securitization knowledge from experts in the US, back to Paris to be used in the development of new transactions. For larger banks with innovative capabilities such as CDC, the knowledge required for securitization did not have to come from an experienced outsider, but from codified knowledge on documentation from pre-existing deals, which could be combined with local financial and legal expertise:

“[Deals can be] reverse engineered, any transaction is public ... and people can analyse that document and in time work out what the questions were... it is inevitably spread through the market'' (partner, law firm, September 2007)

In contrast, other French institutions called upon more direct support from IFCs, where experts would form international project ecologies to create new knowledge. For example, the US global investment bank Bear Stearns also provided advisory services to French banks such as Credit Lyonnais from its London office (IFR 1990, 820; Jacque and Vaaler 2001), and in doing so, utilised US and London based experts to create new French securitization models. However, while research has often indicated that securitization spread from the US into new global spaces (Wainwright 2009), the French narrative is more complex, as Société Générale used its newly developed in-house securitization capability to develop Australia’s first credit card securitization (AUS$200m) (IFR 1990, 830), while Credit Lyonnais soon followed, assisting Equitilink Australia to create a RMBS securitization called Clam worth AUS$100 to for CL Property Finance (IFR 1991, 862). In this sense, while US banks may have provided some advisory support in French securitization, the rapid development of French securitization expert communities did not see French institutions as passive users of securitization, but as an active conduit to spread the concept and technologies globally.

Despite CDC’s early exploration into securitization, coupled to a rapid growth in Parisian securitization knowledge, the French domestic market was slow to develop. Legal restrictions prevented replacement assets from being added to transaction pools, so if consumer debts were repaid this created refinancing risk and deterred investors.[[2]](#footnote-2) This barrier to securitization was removed in 1993 through amendments to the law, triggering a new wave of securitizations, covering consumer and SMEs loans, loans to public authorities, and a first RMBS transaction in 1994 (Couret 1996), by Société des Bourses Franҫaises and Crédit National while Indosuez began to securitize bank loans.

In 1991, Credit Lyonnais, with the assistance of Bear Stearns in London, launched an ABS transaction called CL FCC 90-1 worth FF1bn, and as with most early French deals, it was decided to issue the transaction in Francs to target domestic institutional investors (IFR 1990, 820). This excluded a larger US investor base and ultimately reduced demand for French bonds keeping yields high, until non-Franc transactions were eventually developed, using currency swaps in the bonds’ financial engineering. For example, in 1993, Union de Credit pour le Batiment, the mortgage arm of Compagnie Bancaire launched a UK-domiciled sterling deal called ‘Leo 1 plc’ securitising £170m of mortgages organised by JP Morgan, based in London (IFR 1993,961).

Compagnie Bancaire aimed to reach a wider investor base of UK investors, while in contrast, UK banks were already denominating bonds in US dollars, to attract a wider investor base and reduce funding costs (Wainwright 2009), slowing growth in the French securitization market. The established secondary mortgage bond markets proved more cost effective than developing new RMBS markets, due to high professional fees and the uncertainty of new products. This reduced the incentive for banks to securitize mortgages, (Stone and Zissu 1994), leading lenders to focus on smaller non-RMBS securitization. As will be seen later, Basel capital adequacy regulations were much more cumbersome for Spanish and Italian banks, which stimulated the need for greater securitization volumes, which explains why they later came to eclipse the volumes of the innovative French securitization market.

In summary, securitization concepts and knowledge creation were driven by larger commercial banks such as CDC and Société Générale who were able to uses existing financial and legal knowledges from secondary mortgage and MTN markets to initiate the development of securitization ecologies, using extensive expertise to co-create new knowledges from existing US securitization information from existing documentation. New French securitization knowledges would later circulate this new knowledge amongst other domestic market participants. However, smaller institutions would often seek advice from experienced US investment banks, often based in London, to provide expertise and to assist in the development of new securitization knowledge, although the French banks took a key role in organising the transactions and creating new knowledge.

*3.3 Emerging Spanish securitization*

Spain underwent a wave of financial deregulation in the late 1980s, with the government seeking to promote securitization to assist banks in subverting Basel regulation, while improving mortgage pricing (Hermida 1996). Like France, Spanish financial institutions had already developed a secondary mortgage market through the issuance of ‘Cedula’ mortgage bonds, where bond yields were funded by mortgage repayments, although mortgage assets remained on balance sheet (IWR 1991,891) The Cedula market became less favourable once Basel regulations were introduced, but the existing expertise in developing Cedula bonds, ensured that professional service providers in banking, law, accountancy and tax had an initial set of knowledges that could be modified to create new securitization models compatible with the political economy, (cf. Engelen et al. 2010).

In the 1980s, Spanish capital asset ratios were healthy with the exception of heavy assets like mortgages (Hermida 1996), providing a strong motivation to securitize, while bridging a funding gap:

“The mortgage lending market in Spain has grown at an average rate of 20% per year for the last seven years…sources in Spain expect to see other large Spanish banks, which have large asset portfolios to use this form of asset securitization as a means of freeing up some capital from their balance sheets. At least one US investment bank was last week said to be advising one of the larger Spanish banks on asset securitisation.” (IWR 1991, 891:35).

Unlike in France and the UK, the concept of SPVs was unfamiliar and initially incompatible with Spanish legal frameworks, which made it impossible to move assets off balance sheets[[3]](#footnote-3), creating a barrier to securitization. In 1991, Royal Decree 1289/1991 enabled the off-balance sheet transfer of mortgages, leading Banco Bilbao Vizcaya with Banco Santander assisted by Citibank to develop a securitization which was sold to Spanish institutional investors (IWR 1991,891). The deal was worth US$16.2m (Ptas1.753bn), based on 191 home mortgages and 37 commercial properties, making it small and experimental, although this first deal was adversely affected by uncertainties around tax regulation exposing investors to a withholding tax of 25% (IWR 1991, 891). Nonetheless, this first transaction provided a framework for Spanish securitization and in the same year Hipotebansa securitised a much larger portfolio of mortgages through an issue called ‘Sociedad Espanola de Titulization 1’ (Ptas12.75bn), arranged by Goldman Sachs, covering 3,561 mortgages (IWR 1991, 891: 45). In 1992, Act19/1992 was introduced to enhance mortgage securitization further and in 1994 Act 3/1994 extended securitization to every type of asset. The market grew slowly and in 1994, 5 further RMBS deals were issued by FTH, Hipotebansa, Santander, and SGFTH (Hermida 1996). As in France, financial and regulatory elites were not separated, but coupled in their pursuit of developing securitization markets (Froud et al. 2012; Engelen et al. 2012); as enhancing access to cheap funding for consumers would be beneficial for voters, and therefore government elites, while widening access to credit and accelerating it as debt through capital markets would be profitable for financial elites.

Spanish banks became quickly adept at structuring their own transactions, through the co-creation of new knowledge as they came to use RMBS securitization differently to the US model. US mortgage lenders developed an originate and distribute model (Dymski 2010), where mortgages are issued and securitized immediately, but in Spain, large diverse banks used securitization principally for capital adequacy relief, through infrequent securitization deals. These transactions were very large, creating new complexities and challenges which were unique to Spanish securitization, requiring new knowledges and solutions to be developed in-house:

 “…it’s just, sort of the way the market’s developed…they tend to do a lot more standalone deals, these are very difficult animals to manage, they are so huge, we’re talking about £50billion so when you have loans, an average loan size of 500,000 you have a lot of loans…everything you’re doing is very difficult and complicated to model, very complicated to work through and erm, it’s kind of the way the market has developed, they’ve tended to structure it more themselves, multifaceted much bigger banks can do it themselves” (Securitization Structurer, investment bank, June 2007)

The size of Spanish securitization transactions also developed additional challenges in creating a large enough market to absorb RMBS bonds. Subsequently, Spanish securitizers turned to investment banks with global distribution networks. For example, a joint RMBS securitization by Grupo Banco Popular and three others in 1998[[4]](#footnote-4) utilised the London branch of Morgan Stanley to generate a wide investor base with which to place the bonds (TDA 5 1998). Subsequently, the development of the transaction was not limited to Spain, but involved cross-national project ecologies to create international markets:

“…what’ll happen is [Investment Bank Y] in the US will try and sell, depending on the market in the US, but they will also enlist the global syndicate, that’s the European desk, the Asian desks to sell any product to a client in their respective market” (RMBS Trader, investment bank, May 2007)

In this sense, there are power asymmetries to securitization knowledge. While domestic Spanish securitization institutions and expert communities of practice were able to successfully create new country-specific securitization knowledge, they struggled to develop the power and capabilities to place the bonds with international investors. Subsequently, powerful financial elites, often through US investment banks, were able to leverage their knowledge on global securitization markets to create new markets for Spanish bonds, using their international networks. In doing so, they retained exclusive knowledge and power over the creation of global markets and locked in their ability to charge fees (Erturk and Solari 2007), offsetting the reduced demand for their external structuring advice.

This is significant, as while external US advice was initially important, larger Spanish banks came to manage much of the transaction development internally through the creation of new knowledge, and advice from a financial boutique, Ahorro y Titulización, which provided independent analysis for larger banks with established securitisation programmes (DBRS 2011). As highlighted above, the size of the securitizations created new challenges, but US securitization models were based on assumptions of US laws, markets and consumer behaviour, that were different compared to Spain. This required existing securitization knowledge to be altered and models restructured to account for the particular features of local assets, including interest rates and laws around repossession, which would affect how the deals were engineered:

“…if you wanted to compare, you know what’s important to investors in Italy vs. Spain, they’re very different in what they’re looking for and also how the deals are originated and the structures, they’re really different… different structures come about because you have different credit risk…there’s many different legal issues so you have to structure them differently, to get around different legal impediments…the interest rate scenarios are different in Europe, it will change based on jurisdiction…even the default patterns work differently to here as they are in Spain, so every aspect of modelling and transactions and structure is different” (Bond-rating analyst 1, bond rating agency, November 2007)

This required larger Spanish banks to co-create new project ecologies using insight from banking and law, to understand how regulations would affect the financial modelling and assumptions which shaped the financial engineering of the bonds. On the other hand, smaller banks that were undertaking securitisation for the first time would seek international expertise, widening out the networks of securitisation production, through London as a financial centre. For example, later in 2006 a regional bank Caja Murica launched its first €350m RMBS deal, which was managed by Bear Stearns in London, who also managed the swaps, with assistance from Santander in Madrid (Standard and Poor’s 2005), stretching the co-creation of new knowledge across multiple financial spaces.

In summary, the initial development of Spanish securitization was led by domestic elites, with domestic financial institutions working closely with US investment banks, and experts often circulating from offices in London. However, Spanish banks were quick to develop new internal knowledges on securitization, and due to the different consumer market characteristics, regulations and the size of the transactions, new knowledge needed to be co-created to manage these risks and challenges. While US investment banks continued to play a role in developing securitization with smaller Spanish banks, the development of local boutique securitization firms such as Titulización de Activos and the circulation of knowledge through Spanish financial firms, reduced the reliance of Spanish banks on international project ecologies, with the exception of creating international markets to place Spanish RMBS bonds. This is consistent with wider studies that have witnessed the emergence of core-periphery processes in Europe, with issuers looking for the deepest international financial markets to place bonds (cf. Engelen 2007).

*3.4 Emerging Italian securitization*

As with the case of France and Spain, Italian financiers viewed securitization as a Basel circumvention technique. However, Article 1232 of the Civil Code provided a considerable barrier until it was abolished with the 1993 Banking Law (D’ Ambrosio 1996). Under Article 1232, each customer whose asset was being moved to an SPV would have to give their written consent (D’ Ambrosio 1996), so a bank wanting to securitize its credit card portfolio would have to contact all its customers, which would be operationally problematic. Until a further amendment in 1994, securitized bonds could only be issued if their value did not exceed the capitalisation of the SPV, but as SPVs exist only to hold assets off balance sheet, they often have low capitalisations which meant that securitizations would not be financially viable (D’ Ambrosio 1996)[[5]](#footnote-5). Subsequently, legal barriers to securitization continued until the mid-1990s. While financial and regulatory elites collaborated on the development of new regulation to facilitate securitization, it was not completed as quickly and as smoothly in France and Spain.

There is debate as to when Italy’s first securitization occurred, but some recognise this as an ABS deal called Chariots1, organised by Citibank in 1985 (Jacque and Vaaler 2001).A Citibank subsidiary, Citifin,securitised £220million of auto loans, but due to the unavailability of SPVs, a synthetic structure was to bypass regulatory barriers. Although the deal used financial engineering as used in securitization, it did not use an SPV for off-balance sheet financing, hence is not considered a ‘full’ securitization. The transaction was structured in the US by Citibank, and the model would later be copied by other imitators in Europe, which in turn began to circulate new Italian securitization knowledge to Italian financial institutions (Jacque and Vaaler 2001).

Despite the legal barriers to securitization, financial institutions still examined its feasibility in the 1990s with the Italian bank San Paulo working with Salomon Brothers, who had also assisted in the development of the first UK RMBS securitizations (IFR 1990, 816). However, alongside regulatory barriers, Italian banks collected limited credit information on consumers, which made it difficult to apply US securitization models and financial engineering to Italian markets, as information asymmetries undermined the ability of analysts to assess the credit quality of asset pools (IFR 1990, 816). Additional re-regulation in 1999 (Law 30) legally clarified the roles of the different entities involved in securitization, and in 2003 Legislative Decree 6 made it possible to securitize bank loans and whole businesses, widening out the potential assets for securitization further (Messina n.d). Subsequently, due to information asymmetries and regulation, it took longer for Italian financers to begin securitization programmes, in contrast to France and Spain.

With the exception of the US controlled Citi securitization, early Italian securitizers were often reliant on extensive project ecologies to co-create the knowledge necessary for Italian securitization. For example, Banca del Salento in 1998 was using the advice of French investment bank Paribas, and Lehman’s through their London branch, to co-create new knowledge. The production modes of these new Italian securitization knowledges began to shift, as prior to the unravelling of European securitization markets in 2007, the Italian securitization industry had made substantial steps in developing embedded expertise (Seashell Securities 2003), with local securitization boutiques, such as Finanziaria Internazionale and Securitization Services, providing advice, built on knowledge from local transactions and cross-disciplinary project ecologies. However, as with Spain, Italy experienced power asymmetries in terms of securitization production and distribution knowledges, and required global banks to distribute securitized bonds, as demonstrated by BancaItalease’s 2007 RMBS securitization, which was using French investment bank BNP Paribas’ Milan office to arrange and distribute the bonds (Italfinance 2008).

One notable feature of the development of the Italian securitization market was the role of British law firms who had often followed global investment banks and into different European financial centres. This enabled them to develop new legal and financial knowledges to assist in overcoming the barriers to Italian securitization models:

“…we responded to the demand for services in different geographic locations…it’s for a range of things, corporate finance, tax, etc, and so, we’ve grown in Europe…structured finance tends to, erm, be a product that grows around markets where they have very sophisticated capital markets, so we have seen a lot of that work in Spain and Italy as those markets,” (Partner, law firm, July 2007)

As France and Spain benefitted from established bond markets, where consumer receivables funded MTN notes, it was easier for bankers and lawyers to make incremental changes to existing knowledge through bricolage, and to co-create new securitization legal knowledge. In Italy, the extensive legal barriers required external advice to create new knowledge, and to reshape the existing regulatory frameworks that created barriers to Italian securitization. This led to the formation of new cross-national CoP in London and Milan that became involved in the design of new government legislation 1999:

“…we were asked by the [Italian] banks to help them lobby for as flexible a framework as possible when they knew the law was going to be changed…at that point we got involved in persuading the regulators and legislators, to produce a framework that was going to be not difficult to comply with,” (Partner, law firm, July 2007)

The role of British legal communities operating in Italy was not to just transfer existing knowledge, but rather to provide support in knowledge management around legal issues with Italian lawyers and financiers, which supported the cultivation of the nascent securitization community of practice in Italy:

“I practiced English law in Italy, and worked with Italian colleagues, and as an example of knowledge transfer, in the same way it happened with US lawyers to English lawyers for the first [UK securitization] transactions, with my first, the first transaction we were able to pass on our experience of the issues that come up on securitization to our Italian colleagues, we did our first deals together in Italy, it was the same process in a way” (Partner, law firm, July 2007)

In summary, Italian securitization diffusion was driven by local institutions and US financial institutions. Although, there is uncertainty around the Chariots1 deal’s status as being a ‘full’ securitization, the structured finance technology which underpinned the deal was brought to Italy by Citi from the US. The model, although US designed, created the first Italian securitization knowledges, which made elements of securitization technology compatible with the Italian political economy. However, as with Spanish and some French transactions, global CoP were used to connect US expertise, often though London offices, to enable Italian financial institutions to issue their own transactions, co-creating new knowledges, which would remain embodied within local project ecologies, through banks law firms and securitization boutiques.

1. **Conclusions**

Research in economic geography has increasingly drawn attention to the geographies of securitization, and its role in spreading the GFC beyond US borders. In doing so, the research base has begun to debunk earlier notions that securitization markets are universal and homogenous in their operation (Aalbers et al. 2011; Aalbers 2009a; Leyshon and French 2011; Bassens 2012). Building on this work, the paper has offered new insight into how the US idea of securitization became integrated within European financial centres, by examining how new securitization knowledge was circulated and co-created to produce new localised securitization models that became embedded within the political economies of France, Italy and Spain.

Following recent research from organisational sociology and economic geography (for example, Wenger et al. 2002; Grabher and Ibert 2006; Faulconbridge 2010; Hall 2009), the paper used a CoP lens to examine how different types of domestic and international communities including financiers and lawyers co-created new securitization knowledges. In doing so, it was highlighted how new securitization knowledge was developed incrementally out of existing knowhow from CoP operating in established bond markets in Paris, Madrid and Milan (cf. Engelen. et al. 2010). While new securitization knowledge was co-created by project ecologies, the development of the first French, Spanish and Italian securitisation transactions was driven by existing local financial institutions which worked with US investment bankers based in New York or London, or US subsidiaries in Europe developing their own securitizations. In some instances, innovative copies of existing securitization transactions were made, using existing market knowhow and transaction documentation. Subsequently, the paper provides new insight into how CoPs function and how networks are configured in new knowledge creation.

The paper has offered new insight into the geographies of securitization (Aalbers et al. 2011), but also how the configuration of existing financial markets and financial networks shaped the securitization models used in each political economy (c.f Thiemann 2012). This is particularly notable, as it emphasised how policy-makers in France, Spain and Italy played an active role in developing securitization, by removing regulation that acted as a barrier and replacing it with laws which support securitization, helping financial firms to circumvent Basel capital controls (cf. Thiemann 2014, Froud et al. 2012). Placing this finding within wider debates on financialization, it can be argued that governments play a central role integrating consumers and capital markets, to enhance the efficiency and profitability of financial services firms (cf. French at al. 2011).

The approach used in this paper could also prove useful for future studies on financialization. Existing studies often tend to examine the processes of financialization in the spaces of the organisation or national political economy (French et al. 2011). However, viewing financial products as sets of mutable, spatially embedded knowledges, rather than immutable concepts, will enable researchers to trace how new products are shaped by a variety of actors and spaces, and in turn, examine how new products reshape local institutions and spaces. This would not only offer more detailed insight into the complex processes of financialization, but it could prove fruitful in arguing how the spread of financialization and new financial products is not inevitable, and that researchers should scrutinise spaces and ecologies of CoP to gain deeper insight into their creation and the formation of new markets. This is becoming increasingly important, as policy makers are seeking to grow securitization markets in the recovery (Bank of England/European Central Bank 2014), creating a need for new granular studies on financial products and securitization that can provide new understandings as to how they may be affected in future financial crises. This may enable policy-makers to undertake more informed decision-making when developing financial market regulation and interventions concerning securitization and capital markets.

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1. Given the constraints of the paper and data availability, it is not possible to cover all European countries, so three core case studies have been chosen. [↑](#footnote-ref-1)
2. For example, if a credit card included in a securitization is repaid, a replacement debt cannot be added to the deal. This is problematic as assets set to pay investors a yield for 5 years can theoretically all be repaid much earlier, meaning that an investor loses any anticipated income from interest payments. [↑](#footnote-ref-2)
3. Assets are moved off balance sheet in a securitization to separate them from the original lender. This brings two benefits. First, the lender no-longer holds the assets, so it does not have to provide capital adequacy reserves to cover their liabilities. Second, the risk can be re-engineered to reduce the risk in some bonds. Subsequently, bonds issued by securitization can bear, in theory, a lower credit risk than the original lender. [↑](#footnote-ref-3)
4. Grupo Banco Sabadell, Caja Madrid, Ibercaja [↑](#footnote-ref-4)
5. The SPVs used in UK securitization have a capitalization of around £50,000, but are able to issue bonds worth over £1,000,000,000. [↑](#footnote-ref-5)