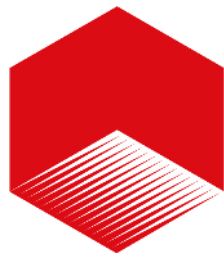




# **Securitisation**

## **Basic Overview**



**PCS**

**October 2014**

# 1. WHAT IS SECURITISATION?

## ***Lendings***

In the world, there are basically two places where you can borrow money: banks and capital markets.

Banks make loans. Capital market lenders lend by buying bonds<sup>1</sup>. Because they buy bonds, capital market lenders are usually called “capital market investors”.

Who are “capital market investors”?

- insurance companies
- pension funds
- asset managers (who manage money on behalf of others)
- corporate treasuries of big companies
- central banks and sovereign funds (who manage government money)
- individuals

To be economically viable, bonds need to be of a certain minimum size – over a few tens of millions of Euros. Also, capital market investors buy bonds from investment banks or other capital market investors. In other words, they do not have branches like banks, where small borrowers can ask for a loan. As a result, big companies and governments are able to borrow from the capital markets. Individuals and small companies cannot. Individuals and small companies who need to borrow will most likely need to go and see their bank.

In other words, without access to bank loans, families will find it almost impossible to buy a new house or flat, and will often struggle to buy that new car. Small and medium enterprises (SMEs) will struggle with their working capital to keep operating and will find it almost impossible to fund the next stage of their growth. In turn this will drive down sectors such as construction, car manufacturing and machine tool production. It will limit new employment opportunities, in Europe, primarily created by SMEs. It will rein in Europe’s export success and innovation, two areas where again SMEs play a key role. It will even affect large European companies that rely on European SMEs for many of the components that are part of their products.

## ***How securitisation works***

Securitisation builds a bridge between banks and the capital market: banks lend money to their customers, including families and SMEs. They then combine the loans into what are called “securitised bonds” or “asset backed securities”, which they sell to capital market investors. The capital market investors will then periodically receive the interest from the securities they have bought and will get repaid when the borrowers repay the loans.

---

<sup>1</sup> A “bond” is just a loan that can be sold to other investors.

The bridge created by securitisation works for both small borrowers and capital market investors: small borrowers can, indirectly, access the capital market, capital market investors can lend to borrowers that they could not otherwise reach.

For banks to do this, they must, of course, cover the costs of making the loans and still make a small profit even after securitising them. The banks can achieve this because there is a difference between the interest paid by the borrowers on their loans from the bank and the interest paid to the capital market investors who have invested in the securitised bonds. The interest charged to the borrowers is higher than the interest demanded by the capital market investors who buy the loans once they have been securitised.<sup>2</sup>

## 2. POOLING AND TRANCHING

For securitisation to really work though, two additional characteristics are required: “**pooling**” and “**tranching**”.<sup>3</sup>

***By pooling and tranching, securitisation allows sectors of the economy to be funded by capital market investors who can choose how much risk they take, for how long they want to take that risk and for what return. Pooling and tranching are what make securitisation unique as a means to match up specific investment needs such as those of pension funds and insurance companies with the funding needs of European households and SMEs. This is how these two concepts work.***

Capital market investors invest large sums at a time. So for securitisation to work, the bank loans that are securitised are grouped together in larger “**pools**”. Capital market investors in one securitisation do not invest in one mortgage or one SME loan but in a whole pool of mortgages or loans, all transferred at the same time.

The rationale of “**tranching**” is that different capital market investors have a different appetite for risk: while most of them do not wish to place their money in risky investments and are willing to accept lower returns, some specialised capital market investors are willing to accept more risk to get a higher return.

In any pool, a bank knows that a small number of loans will go bad. This is true even in the best of economic climates: some customers fall on hard times, some make mistakes. These losses are the “inevitable losses”. We all also know that if the economy starts to suffer, jobs will be lost and companies will close. The number of loans that will go bad will rise. These we will call the “recession losses”<sup>4</sup>. Then, banks know that a large portion of their loans will

---

<sup>2</sup> This difference which appears in many other economic activities is the “wholesale/retail differential”.

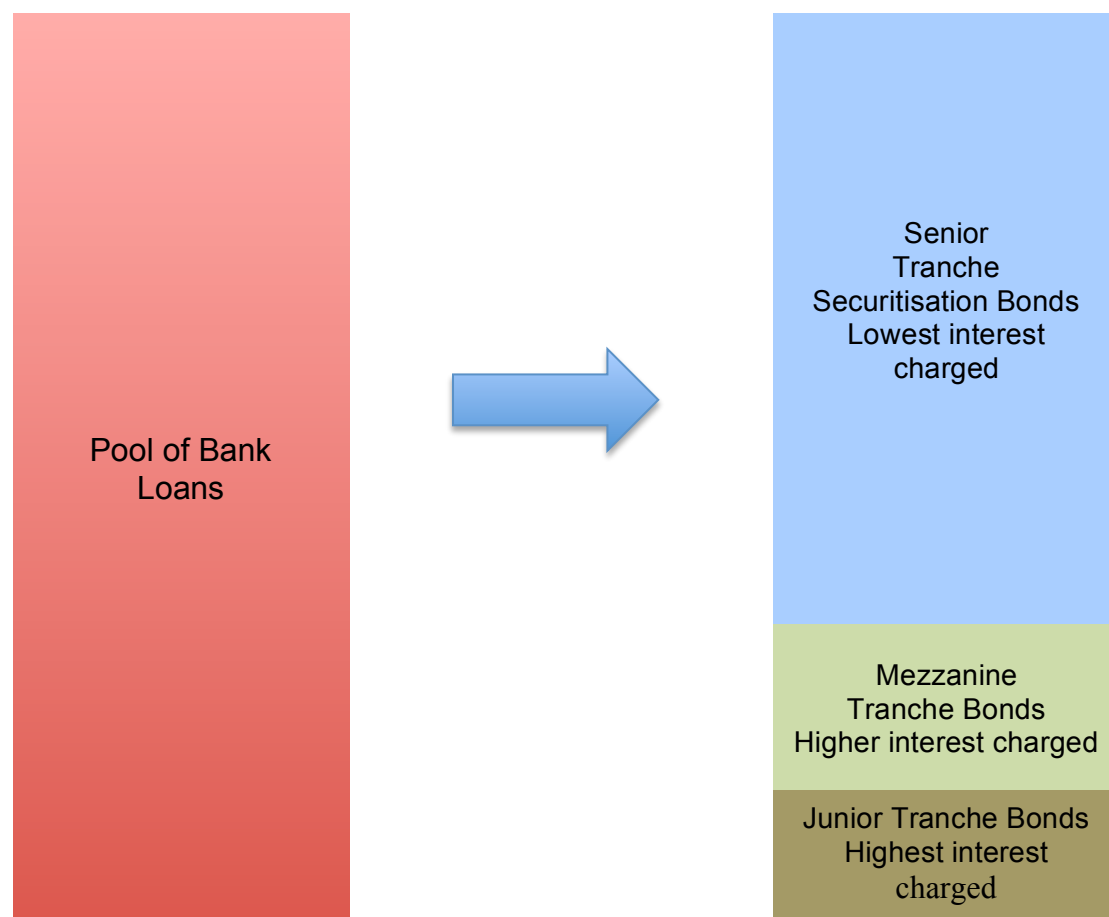
<sup>3</sup> Appendix A contains an illustration of a typical securitisation.

<sup>4</sup> Of course, the worse the recession, the worse the recession losses. So, in fact, there is not one level of recession loss for any given pool of loans but different layers each corresponding to a given severity of recession. For simplicity’s sake though, this paper will speak of them as a single number.

never go bad – even in the worse recession a majority of borrowers repay. Let us call this the “rock solid loans”. Of course, the banks do not know, when they make the loan, which borrower will fall in which of the three categories. (If they did, they would never make loans to those in the “inevitable loss” category!). But, for any pool of loans, a bank that has done a good lending job will know roughly the percentage of each category.

So, to match the different taste of investors for risk and return, banks establish repayment priorities on securitised bonds: under this approach, the capital market investors who have less tolerance for risk are paid both income and capital first; what is left then goes to investors which have more risk tolerance.

No-one recalls why “tranche”, the French word for “slice”, came to be used for this but when one looks at the diagram below it is obvious why the idea of a “slice” came to mind. Each group of investors takes a different slice of the risk in the pool.



In essence, the result of tranching is the same as if each type of investor had invested in the group with which it feels most comfortable : risk-averse investors in the “rock solid loan” group, return-seeking investors in one, or sometimes more, “recession losses” groups. There is also an “inevitable loss” group. This is usually, but not always, kept by the bank since investors do not wish to take inevitable losses. The bank does get compensated though

because, in lending generally, the interest rate paid by borrowers contains a portion that protects the lender from inevitable losses caused by other borrowers. That portion is still usually paid to the bank after the securitisation.

Without tranching, the fact that most large capital market investors are very risk averse would mean that mortgages or SME loans could not get funding, as they would not be in the “rock solid” group. Since the “recession losses” group is much smaller in size than the “rock solid” group, you need to find many fewer specialised investors than for the “rock solid” group.

Also, with tranching, it is possible to specify in what order in time each tranche is paid. So you can agree with the investors that the first third of loan repayments go to one tranche, then the next third to another and the last third to a third tranche. This means that, although all three tranches represent the “rock solid loans”, the investors in the first of these tranches will get repaid quickly whilst the investors in the last tranche will be repaid later. In the same way as different capital market investors have different appetites for risks, different capital market investors want to lend for different lengths of time. Asset managers who like to vary their strategy over time might like to lend for less time so they can reinvest their cash into different products, whereas pension funds with very long term obligations may like to lend their money for much longer periods.

In the same way that tranching allows capital market investors with different risk appetite to invest in households and SMEs, it also allows investors with different time horizons to do so.

### **3. WHY SECURITISATION MATTERS**

During the more than a decade long boom that preceded the beginning of the crisis in 2007, banks’ lending grew enormously. As the crisis erupted, banks lost substantial amounts of money. As a result of seeing how much more fragile banks were than was understood before the crisis, policy makers decided that banks, going forward, would need more capital for every Euro they lend. But capital is difficult to raise for banks in the middle of a crisis – and even more so when the crisis started off as a bank crisis.

The result of losses suffered, the ongoing recession and the new regulatory requirements to raise more capital, mean that European banks are struggling, and will continue to struggle in the years to come, to lend in adequate amounts. If you cannot raise more capital to match your lending, the alternative is to reduce your lending, to match the capital you still have or the little you can raise. This process of reducing the amount of bank lending in the economy is known as “bank deleveraging”.

It is estimated that over the next five years “bank deleveraging” will remove at least € 2 trillion of bank lending in Europe (yes - €2,000,000,000,000). Even this is a conservative estimate. In a White Paper PCS published in 2013 we estimated that the missing bank lending needed to power economic growth in

Europe over the next five years is actually €4 trillion. Others have put the figure even higher.

In past recessions, some of this gap would have been filled by government spending. But in Europe today, governments themselves are “deleveraging”.

Therefore the only conceivable pool of cash that is available to fill this gap is capital market investors. This is already happening with large European companies. They are borrowing record amounts from capital market investors through the corporate bond market to replace loans that would otherwise have come from banks. But this is not quite enough and, in particular, what about households and SMEs?

The only way that presently exists on a large enough scale to provide capital market lending to households and SMEs in Europe, is securitisation. That is why a strong securitisation market in Europe is so crucial if we wish to avoid a deep and even more prolonged recession.

Going forward, many policy makers have also expressed the view that Europe would be safer and more stable if its economy relied less on banks. Part of the reason the crisis hit Europe so badly is that it started as a banking crisis and banks account for 75% to 85% of the entire financing of the European economy.<sup>5</sup> With less reliance on bank funding and more reliance on capital market funding, it is strongly felt that Europe would be less vulnerable to problems in the banking sector. It would also make a resolution of a banking crisis without reliance on taxpayers’ money easier to achieve. Securitisation is one of the ways in which the capital markets can provide funding to the economy.

#### **4. GOOD AND BAD SECURITISATION – LESSONS OF THE CRISIS**

But isn’t securitisation the same “sub-prime” toxic product that got us in the crisis in the first place? Why would we want to get any of that stuff back?

What the crisis taught us is that the toxic securitisations were not toxic because they were securitisations, but because they were fundamentally flawed securitisations. And we are now able to identify what was wrong with the securitisations that caused so much loss. We can also see that securitisations that did not possess these flaws did well. In fact, they did so well that in most types of securitisations done in Europe (for example for residential mortgages, car loans, equipment leasing and SMEs), investors in the “rock solid loans” part of the pools have suffered no losses whatsoever. Even investors in the “recession losses” part have only suffered very small losses. In the case of European mortgage securitisations, even in the “recession losses” part of the securitisation *in the worse recession since the war*, investors have lost to date no more than 0.12% of their investment.<sup>6</sup>

---

<sup>5</sup> By way of comparison, in the US which is recovering from the crisis faster, only around 25% of the financing of the economy comes from banks.

<sup>6</sup> We set out in Appendix B the losses in securitisations to date.

But, in the flawed securitisations, losses have been enormous.

So what are the flaws that led to securitisations collapsing?

They are three:

**Originate to distribute:** normally, when a bank securitised loans, it did not securitise all of them. A bank with 20,000 SME loans would maybe securitise 10,000 of them. Also, banks often kept the “inevitable losses” part of the pools and, not uncommonly, some of the “recession losses” part. But in the years just before 2007, some banks and financial institutions - essentially in the United States - started to securitise all their loans. This meant that they transferred all the risk of their lending to capital market investors but still made money from each loan they made. So the more loans they made, the more money they made, with no risk. The risk became “somebody else’s problem”. Very quickly some of these banks stopped caring entirely about the quality of their loans, as they did not keep them more than the shortest span of time, and just cared about making as many loans as possible. The easiest way to do this was to drop their lending standards. By doing this, they generated billions of dollars of toxic assets that they moved to capital market investors. This was the origin of the US sub-prime catastrophe.

This did not happen in Europe and today laws have been passed to prevent a sub-prime type crisis from ever happening here.

**Re-securitisations:** in the years before 2007, financiers came up with incredibly complex products designed to provide high interest rates for investors. Some of these products (known as CDO of ABS, CDO squared and by other names) used pools of the “recession losses” part of existing securitisations to try and create the equivalent of a “rock solid loan” securitisation tranche. Although theoretically possible, these creations were incredibly dangerous. This is because in lending, what is “rock solid” and what is “recession losses” depends on a good faith estimate. In a normal securitisation, if the bank and the rating agencies’ estimation is a little off, the risk to the securitisation is a little increased. Of course, if the estimate is badly wrong, the risk to the securitisation is much greater, but the chances of it being badly wrong are pretty small.

But in a re-securitisation, if the bank or the credit agencies estimate is even a tiny bit off, the impact on the risk to the securitisation is very large. This makes them incredibly risky, yet they were sold as incredibly safe.

**Refinancing risk:** in most securitisation, we saw that the capital market investor gets paid when the borrower pays his loan. But in a certain securitisations, where the securitisation must be paid back before the money is due on the securitised assets, the only way the capital market investor could be paid on time is if another capital market investor or a bank can be found to refinance the securitised loan. This made the riskiness of these securitisations very difficult to judge. With credit skills you can try to

determine how likely it is that a small company can repay your loan. But how can you determine whether some capital market or bank will want to lend to that company in 5 years time? Even if the small company is healthy, banks may not be willing to lend. This is what we see today with many strong and solvent SMEs trying to borrow money from banks.

All the securitisations that became toxic had one of these three features, and sometime more than one!

Those that did not have any of these features performed well, exactly as predicted. These were safe, predictable and robust products.

**Transparency:** another problem with the securitisation market before 2007 is that some parts of it were not transparent. Investors who had invested in them simply did not have enough information to really understand the risks they had taken. This meant that, when the crisis broke, many investors became so concerned about these unknown risks that there were “fire sales”. These fire sales fed on themselves and became a panic that led many investors to sell sometimes good securitisations for much less than they had bought them. So, many of the losses attributed to securitisation were generated by selling sometimes good securitisation at fire sale prices because of a lack of information<sup>7</sup>.

Today, in Europe, new laws and regulatory action have come into force to ensure that this lack of transparency cannot be repeated.

## 5. WHAT MUST BE DONE

After the crisis, policy makers identified toxic securitisations as one of the culprits. They correctly required that new standards be drawn up to prevent any repetition of the problems that securitisation had caused.

These efforts are starting to bear fruit in the form of a whole series of proposed rules at EU level, regarding bank capital and bank liquidity, as well as rules about insurance company capital and funds. At the moment, there are literally dozens of proposals that will affect the future of the securitisation market.

The problem, though, is that most of these proposals were drawn up when we did not have the information that now allows us to draw the lessons of the crisis. None of these proposals (other than the recent proposal for insurance companies that wish to buy securitisations), reflect the distinction between good securitisations and those that are inherently fragile. And so they treat every securitisation as a toxic US sub-prime securitisation. Such regulations

---

<sup>7</sup> This is important when one hears about the losses suffered by banks and others who had invested in securitisations: in many cases these banks and investors sold at a big loss what, in the end, turned out to be very safe investments. Had they held on to them, as some investors did, they would have suffered no losses.



would not allow a vibrant securitisation market in Europe, making it uneconomical.

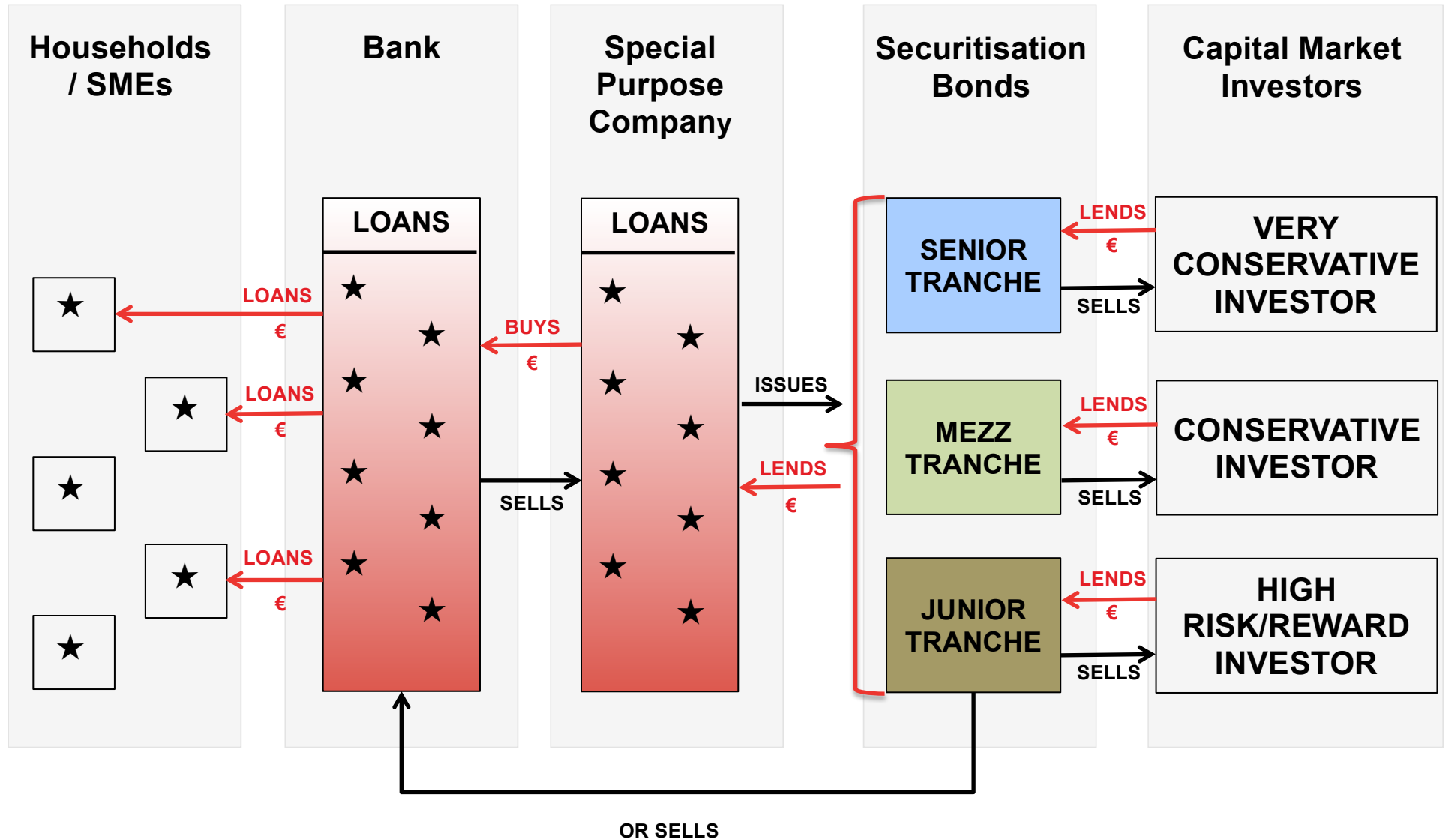
If the European economy did not need securitisation in the coming years, this would be a matter of academic interest for most European citizens. But we do need securitisation.

So, it is essential that the future regulatory proposals explicitly recognise the difference between high quality securitisations and others. This is the only way to ensure that securitisation can provide funding for households and small companies in Europe but is only allowed to return in its strong and safe form. Once this differential regulatory treatment is in place, rules for high quality securitisations can be set to reflect the real level of risk they represent, based on the way they behaved during the worst crisis since the war. The types of securitisations that are not high quality should instead be regulated according to the, much higher, risk that they revealed during the crisis.

Fortunately, this is a problem that has now been recognised by many policy makers in Europe, from the European Commission and Parliament to central banks such as the European Central Bank and the Bank of England. This is the time to work together to craft safe and strong rules that allow for good securitisation to fund European small businesses and household whilst eradicating or controlling the dangerous products that caused such damage in 2007 and 2008.

**October 2014.**

## Appendix A: Securitisation



## Appendix B:

### Credit Performance statistics: Mid 2007 to Q2 2014

	Original Issuance (EUR billion)	Default Rate (%)
<b>Europe</b>		
<b>Total PCS eligible asset classes</b>	<b>960.2</b>	<b>0.18</b>
Credit Cards	33.2	0.00
RMBS	756.0	0.14
Other consumer ABS	68.0	0.18
SMEs	103.0	0.55
<i>Only senior tranches to be PCS labelled, the default rate for which is zero, like Covered Bonds</i>		
<b>Total Non-PCS eligible asset classes</b>	<b>711.5</b>	<b>5.88</b>
Leveraged loan CLOs	70.6	0.10
Other ABS	68.8	0.00
Corporate Securitisations	47.9	0.17
Synthetic Corporate CDOs	254.4	2.88
CMBS	163.3	10.66
Other CDOs	77.8	6.54
CDOs of ABS	28.9	41.08
<b>Total European securitisation issuances</b>	<b>1671.7</b>	<b>2.60</b>
<b>Covered Bonds</b>	<b>1085.0</b>	<b>0.00</b>
<b>Total European issuances</b>	<b>2756.7</b>	<b>1.58</b>
<b>Select US asset classes</b>		
Credit cards	295.4	0.14
Autos	198.2	0.04
Student loans	266.8	0.35
RMBS	3254.9	22.97

Source: Standard & Poor's

## **Contacts at the PCS Secretariat**

Ian Bell, Head of PCS Secretariat

Tel: +44 (0) 20 3440 3721

Mob: +44 (0) 7500 558 040

E: [ian.bell@pcsmarket.org](mailto:ian.bell@pcsmarket.org)

Mark Lewis, Head of PCS Operations

Tel: +44 (0) 20 3440 3722

Mob: +44 (0) 7500 448 833

E: [mark.lewis@pcsmarket.org](mailto:mark.lewis@pcsmarket.org)

Tris Lateward, Office Manager

Tel: +44 (0) 20 3440 3723

Mob: +44 (0) 7780 333 895

E: [tris.lateward@pcsmarket.org](mailto:tris.lateward@pcsmarket.org)

[info@pcsmarket.org](mailto:info@pcsmarket.org) (for general enquiries)

[admin@pcsmarket.org](mailto:admin@pcsmarket.org) (for the label applications)

[www.pcsmarket.org/contact-us](http://www.pcsmarket.org/contact-us)