

## Systemic risk due to retailisation?

Oliver Burkart and Antoine Bouveret<sup>\*+</sup>

*Over the last few years “retailisation”, i.e. the marketing of complex products to retail investors by financial institutions, has reached very significant volumes and has emerged as a potential source of concern.*

*Retailisation has the potential to increase systemic risks through two main channels. The first is the household channel, whereby the exposure of retail investors to financial markets may result in losses that reduce their financial wealth and consumption, and so have an adverse impact on GDP. This effect could be amplified if the volumes of complex products – particularly those with a high risk profile which retail investors may not fully understand – were very significant and were spread over a broad base of investors. The second is the banking channel, which is linked to the supply of complex products: financial institutions that rely heavily on complex products as a source of funding may be exposed to funding risk if the market experienced a sharp decline. Funding pressures could then lead to a reduction in the supply of credit to the real economy due to the deteriorating condition of financial institutions. Risks arising through those two channels could be further aggravated by the increased interconnectedness between financial institutions resulting from the complexity of the products.*

*Unexpected low returns or losses which are broadly-based and large-scale might consequently trigger a loss of confidence in the financial system and could also have an impact on banks and other financial intermediaries. This Commentary presents the results of work carried out on these issues, with a particular focus on the household channel.*

**Keywords:** European Systemic Risk Board, ESRB, retailisation, systemic risk, macro-prudential supervision and regulation, macro-prudential policy

\* From the European Securities and Markets Authority (ESMA).

+ **Disclaimer:** The "Macro-prudential Commentaries" is a publication aimed at informing the interested general public about issues that are relevant from a macro-prudential perspective. Any views expressed in the Commentaries are those of the authors and do not necessarily reflect the official stance of the ESRB or ESMA. In particular, any views expressed in the Commentaries should not be interpreted as warnings or recommendations by the ESRB as provided for in Art.16 of Regulation No.1092/2010 of 24 November 2010, which are subject to a formal adoption and communication process. Reproduction is permitted provided that the source is acknowledged.

## 1 INTRODUCTION

Several policy-makers and regulators in Europe have signalled the potential risks represented by the increasing investment by retail investors in complex financial products. In an economically difficult environment, banks and insurers may gain an additional fee-based source of income by encouraging retail customers to take on exposures to such products. However, retail clients might not have the experience or expertise to make well informed investment decisions concerning certain products or to properly and fully assess the risks they entail (for instance, marketing materials might lack transparency, generating the potential risk of mis-selling). Financial products in this category may be considered complex<sup>1</sup> (although they may not necessarily be risky).

First and foremost, the development of retailisation carries potential risk for investors when clients are exposed to market risk (as with any risky investment) and credit risk (especially if they purchase products that are issued as unsecured notes). Retailisation can also entail potential systemic risks through two channels. Market turmoil might lead to significant losses for retail investors, which can, in turn, negatively affect consumption through wealth effects and ultimately have an impact on the real economy through GDP. This is referred to hereafter as the “household channel” of systemic risk propagation. On the supply side, the sale of complex products can contribute significantly to the funding of some financial institutions<sup>2</sup>; a sharp decline in the market could therefore create funding problems for the issuers. This is the “banking channel”. Both channels may be further aggravated if the financial products – by way of their design – increase “interconnectedness”, i.e. the financial linkages between different parts of the financial system. This Commentary mainly focuses on the household channel.

## 2 SCOPE OF THE ANALYSIS

Ongoing work at the EU level aims to define instruments encompassed by retailisation as “packaged retail investment products” (PRIPs). PRIPs cover a range of investment products that are marketed to retail investors. Taken together, they are estimated to make up a market in Europe of about €8 trillion. These products may take a variety of legal forms, including exchange traded funds (ETFs), structured products, complex UCITS<sup>3</sup>, unit and index-linked life insurance products and certificates. Broadly speaking, these products:

- combine exposures to multiple underlying assets;
- are designed to deliver capital accumulation over a medium to long-term investment horizon;
- entail a degree of investment risk, although some provide capital guarantees;
- are normally marketed directly to retail investors.

---

<sup>1</sup> The definition of complex products used in this Commentary is based on an economic approach and might differ from the definition of complex products currently under discussion in the context of the review of the so-called Markets in Financial Instruments Directive or MiFID.

<sup>2</sup> The sales of structured products can also be used to transfer the risk of certain assets to retail investors.

<sup>3</sup> Undertakings for Collective Investment in Transferable Securities.

This Commentary takes a more functional approach and analyses a number of investment products which can – usually – be defined as complex (Table 1). Such products may pose risks when they are marketed or sold to retail clients. The potential risks involved will be presented in more detail in the next section. Table 2 lists other products which usually do not exhibit the same degree of complexity.

There are, however, some severe limitations with respect to the availability of data in Europe regarding the distribution of complex products. This Commentary therefore focuses only on products termed hereafter “structured retail products” (SRPs) for which data are available at European level<sup>4</sup> but which do not include the following items listed in Table 1: exchanged-traded commodities, securitised debt, derivatives, funds without capital protection or life insurance linked to the underlying product by a simple tracker.

There is no legal definition of “structured retail products” in EU regulations. They include products with very different characteristics, regulatory frameworks and distribution patterns across Europe. Finally, it is important to note that the definition of retailisation used here focuses on the marketing stage rather than the design stage of financial products. Indeed, at the design stage, it is not clear whether the complex product will be sold to wholesale clients (i.e. professional clients or eligible counterparties), to retail clients or to both categories. Accordingly, our approach offers only a crude approximation of the market for complex products in Europe. However, the approach remains valid for the purpose of this analysis which focuses on systemic risk due to retailisation.

**Table 1: Products which can usually be considered complex<sup>5</sup>**

<b>Debt products</b>
exchange-traded commodities (ETCs)
structured debt and structured term deposits:
European Medium Term Notes (EMTNs)
structured term deposits (with and without capital guarantee)
other forms of structured debt (containing embedded derivatives and/or provisions on conditional returns) specifically targeted at retail investors
securitised debt:
asset-backed securities (ABSs), collateral debt obligations (CDOs)
covered bonds
<b>Derivatives</b>
futures, forwards, swaps, and options
warrants
financial contracts for difference (CFDs)

<sup>4</sup> The database used for the present study is structuredretailproducts.com.

<sup>5</sup> This list is based on work by the Committee of European Securities Regulators or CESR (the predecessor of ESMA), on MiFID complex financial instruments, and is available at [http://www.esma.europa.eu/system/files/09\\_559.pdf](http://www.esma.europa.eu/system/files/09_559.pdf). This list is not exhaustive; some relevant forms of complex products may have been left out, while others have been added such as formula-based UCITS as they embed derivatives.

<b>Funds</b>
formula-based UCITS with or without capital protection/guarantees
leverage and reverse exchange-traded funds (ETFs) (UCITS and non-UCITS)
non-UCITS:
closed-end funds providing capital protection/guarantees
(tax-advantaged) private equity funds, real estate funds, commodity funds, hedge funds, funds of hedge funds
<b>Life insurance</b>
unit-linked policies (with or without guarantee)
index-linked policies (with or without guarantee)
hybrid life insurance products (combining, for example, unit-linked with traditional insurance funds)
structured products written as insurance policies

**Table 2: Products which are usually not considered complex**

with-profits and other traditional investment products (even when they involve capital guarantees)
savings accounts
shares
depository receipts for shares or bonds
treasury bills/government bonds
ordinary ('plain vanilla' or 'traditional') bonds
cash
ordinary certificates of deposits
commercial papers
subordinated bonds
callable and puttable bonds
pure protection/risk coverage/term insurance policies (insurance against unexpected events)
annuities
mortgages and loans
trackers/ETFs replicating traditional indices

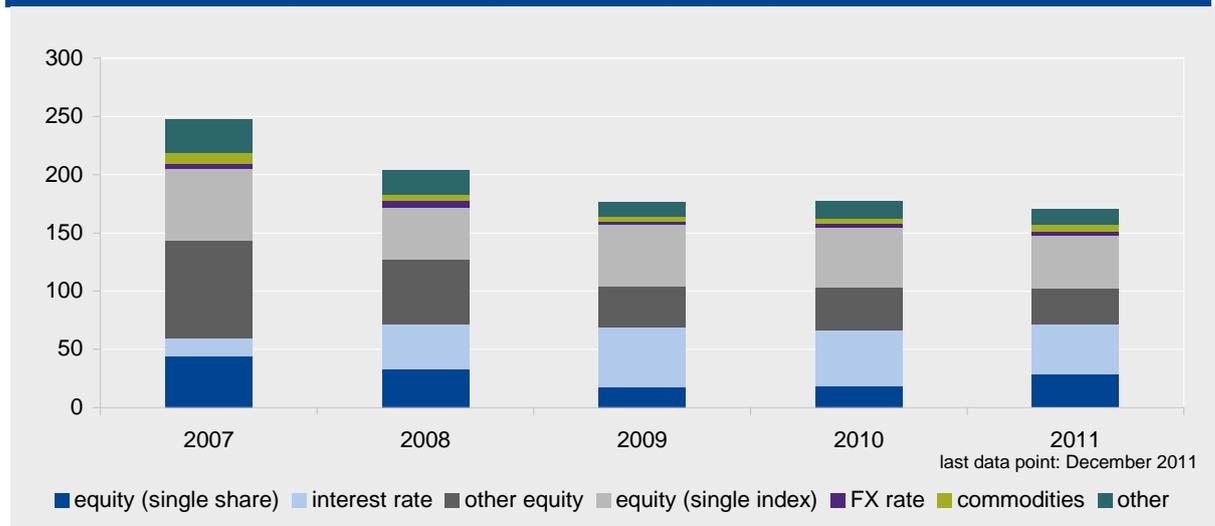
### 3 RECENT TRENDS IN THE EUROPEAN MARKET OF STRUCTURED RETAIL PRODUCTS

After peaking in 2007, gross sales of structured products to retail investors in Europe experienced a sharp decline during the financial crisis. They have stabilised since 2010, however, and have been growing in a few European countries. Sales of SRPs in 2011 were in line with the two previous years – and were even slightly higher in the second quarter relative to the previous year. Overall, sales reached a level of around €180 billion in 2011, still below the levels observed in 2008 (Chart 1), while the total amount of outstanding structured products reached a new peak at around €820 billion (up 13% since 2007).

Currently, SRPs are mainly equity-linked (60% of total sales in 2011) and interest rate-linked (25%). SRPs linked to commodities have been increasing significantly over the last few years, but remain marginal in terms of sales (less than 5%).

Chart 1: Recovery of the SRP market in Europe

### Volume of structured products sold by year in Europe (€bn)



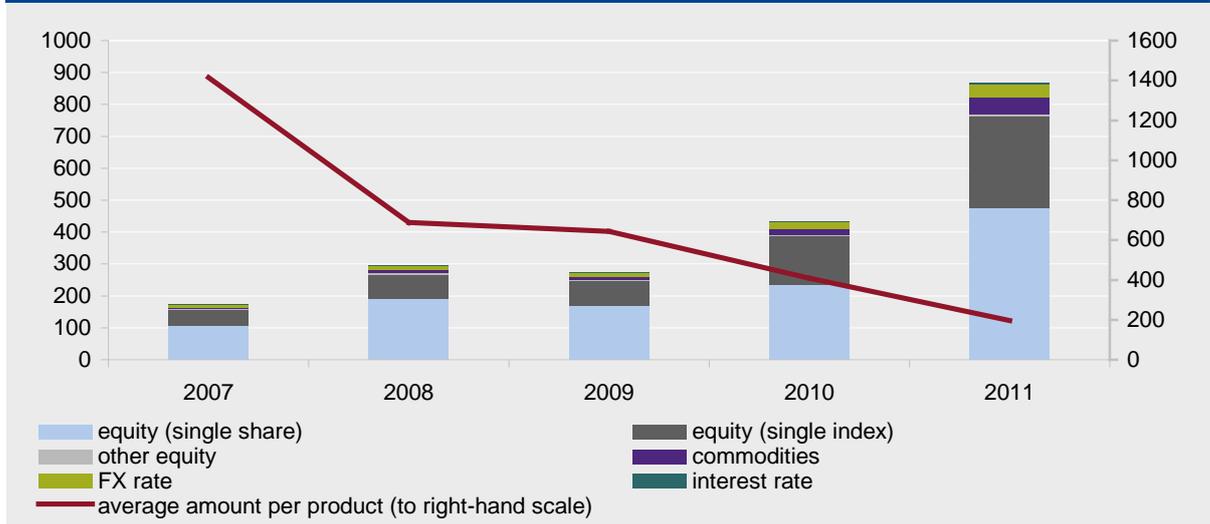
Source: structuredretailproducts.com.

Over the last few years, a growing number of structured retail products have been marketed to retail investors, e.g. some 870,000 new products were launched in the EU in 2011, 90% of which were equity-linked (Chart 2). Some ETFs constitute a subset of structured retail products. The average amount sold per product has declined significantly from €1400 in 2007 to less than €400 in 2011 (Chart 2)<sup>6</sup>.

<sup>6</sup> The figures in Chart 2, as well as those in other parts of the report, include leverage products, which are sold in very low volumes (less than €4 billion in 2011) while the number of issues is very high (around 225,000). If these products were excluded, the average amount per product would be €430 rather than €260.

Chart 2: Strong increase in the number of products issued

### Number of structured products launched by year in Europe (in thousands)



Source: structuredretailproducts.com.

An analysis of the trend of volumes sold in 2010 and 2011 shows that, in terms of capital protection, countries in Europe fall into three main groups, probably corresponding to a certain segmentation of the market for SRPs: Group 1 countries, where more than 80% of SRPs offer 100% capital protection<sup>7</sup> (Italy<sup>8</sup>, Poland and Spain); Group 2 countries, where the share of SRPs with full capital protection ranges from 60% to 80% (France, the UK and, to a lesser extent, Portugal); and Group 3 countries, where the majority of SRPs do not offer capital guarantees of 100% (Germany, Sweden and Switzerland). Other countries are not included in these groups because the absolute size of their markets is small.

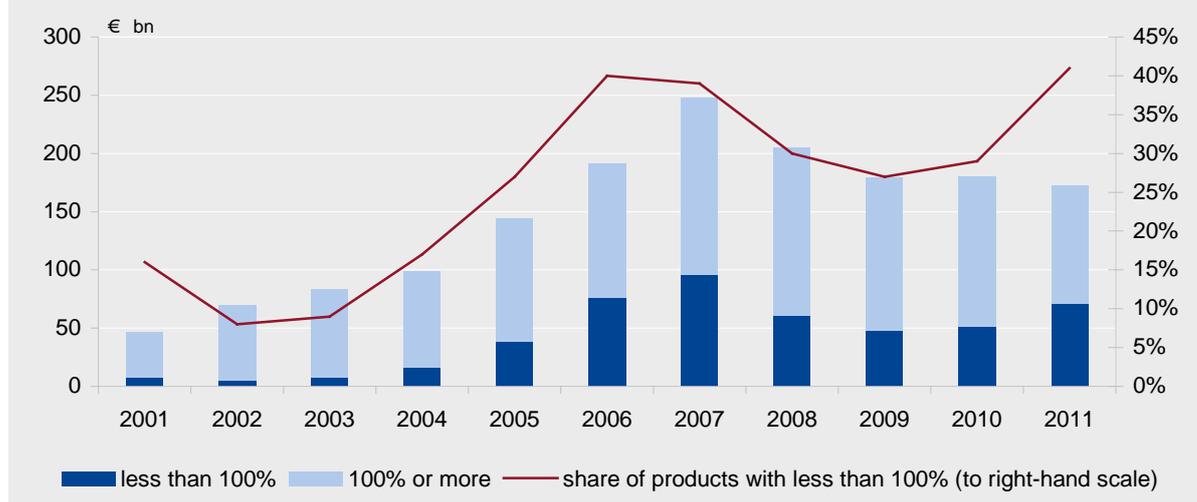
Since 2010 the share of products offered with a capital guarantee of less than 100% has increased in Europe (Chart 3), as issuance has been strong in Group 3 countries and share has increased in countries belonging to the other groups, such as Italy (Group 1) and, to a lesser extent, the UK (Group 2).

<sup>7</sup> The term capital protection or capital guarantee refers to the initial amount of capital provided by the retail investor to acquire the financial product. The guarantee or protection offered by providers refers to the nominal amount. Investments in products with less than 100% capital protection are more exposed to market risk.

<sup>8</sup> In the case of Italy, structured products do not differ much from vanilla bonds offered to the retail investor; they are lightly structured in the sense that the pay-off structure closely resembles the typical bond profile.

Chart 3: Increase in the issuance of risky SRPs

### Sales and share of products sold with less than 100% capital guarantee in Europe



Source: structuredretailproducts.com

## 4 AN ASSESSMENT OF THE SYSTEMIC RISKS LINKED TO RETAILISATION

Retailisation raises issues related to consumer protection and conduct of business, as retail investors may not be able to understand the drivers behind the risks and rewards linked to the complex products they have invested in.

The key risks attached to retailisation (e.g. mis-selling<sup>9</sup>, the loss of confidence in financial markets as a result of negative returns, reputational risks or the drying-up of funding for product providers, notably banks) might potentially develop into systemic risk (for one by their effects on the real economy, which are the focus of this Commentary). These risks are more pronounced for non-capital protected instruments that can actually experience a sharp decline in their value.

Risks might develop into systemic risks if they are broadly-based on the demand and/or the supply side of the market for complex financial retail products and if they generate large-scale shocks. This is true for both of the channels for systemic risk which have been identified (household and banking channels) and for their amplifier in the form of interconnectedness.

### Household channel

- Losses on structured products would result in a decrease of household financial wealth, which may negatively affect consumption (i.e. a wealth effect with an impact on GDP).
- For a systemic risk to arise, two conditions must materialise. First, the volume of complex products – particularly those featuring a high risk profile that is unlikely to be understood by retail investors –

<sup>9</sup> Mis-selling refers to “questionable” practices used by product providers which might, for instance, systematically exploit cognitive biases of investors. This implies selling financial instruments without complying with regulatory requirements (i) regarding the disclosure of information to retail investors and (ii) for firms in determining whether the recommended financial products are suitable to investors.

would have to be very significant and spread through a wide base of investors. Second, shocks, for instance in terms of the negative returns of the products involved, would need to be large.

- This effect could be amplified if structured retail products were sold as substitutes for bank deposits, increasing the exposure of investors to risky assets<sup>10</sup>.

### Banking channel

- Structured retail products are partly used as a funding source by banks<sup>11</sup>, with significant differences across countries and banks. If retailisation were to dry up, as a consequence of a shock caused by negative returns, or if there were reputational effects from large-scale mis-selling of complex products to retail investors, banks might suffer a funding problem that could negatively feed back into the real economy through reduced lending.

### Interconnectedness amplifier

- The complexity of the products sold may increase the interconnectedness of the financial system through the linkages between the issuer, the designer and the distributor of the product. Therefore, a negative shock affecting one of the counterparties in the chain may be spread and amplified, resulting in losses for retail investors and financial institutions that could lead to a reduction in the supply of credit to the real economy.

In the following section the main focus is on the household channel and, to a lesser extent, the banking channel.

### *Systemic risk through the household channel?*

Overall, the potential systemic risks identified do not seem to be tangible as far as the household channel is concerned: simulations have shown that – at this stage and based on available data – retailisation is unlikely to have a significant impact on GDP<sup>12</sup>.

Structured retail products represent less than 10% of household financial assets (Chart 4<sup>13</sup>) in all countries observed. The effect of a sharp decline in the value of those products would therefore be relatively limited in terms of a negative impact on GDP. This limited impact stems from the relatively minor share of structured products in household financial wealth (less than 4% for Europe as a whole), the larger share of capital-protected SRPs and the overall low “wealth effect” in Europe (typically

---

<sup>10</sup> This is also true for structured products offering 100% capital guarantee as investors are exposed to the credit risk of the issuer and counterparty risk of third parties (for example financial institutions involved in total return swap transactions used by the issuer to replicate the performance of the underlying product of the structured product).

<sup>11</sup> Banks can also act as distributors of SRPs, implying that sales of SRPs may not necessary mean that SRPs are used, or only used, for funding.

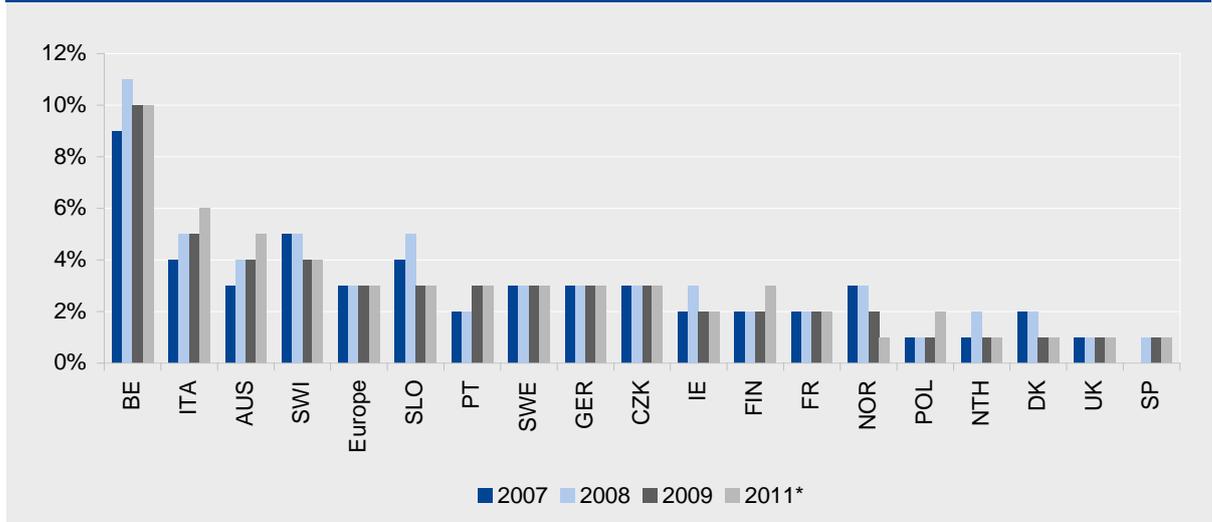
<sup>12</sup> Only first-round effects have been estimated. The loss of confidence in the financial system may add to systemic risk, although this effect is hard to quantify.

<sup>13</sup> As a caveat, it should be considered that the aggregates referring to SRPs in the different countries comprise both 100% capital protected products and products with lower protection. However, the systemic risk posed by the former category of products is much lower, as investors are less exposed to a sharp decline in the value of the products.

less than 10%<sup>14</sup>). However, if the market for structured products targeted at retail investors were to grow sharply over the next few years, possibly as a result of a search for yield in a context of low interest rates, the effects of the shock would be larger. It is hence crucial to monitor trends in the SRP market, as well as trends in the distribution of other complex products to retail investors.

Chart 4: Share of structured products in household financial assets<sup>15</sup>

### SRPs as a percentage of household financial assets



Sources: structuredretailproducts.com, Eurostat and ESMA calculations; \* for 2011, SRPs outstanding are divided by household financial assets in 2009, which is the last point available at the cut-off date for this report.

### Systemic risk through the banking channel?

Financial institutions, particularly banks, may use structured products as a relatively cheap source of funding. This could increase risk.

- If used as substitutes for deposits, SRPs increase liquidity risks as they are not covered by safety nets such as deposit guarantee schemes.
- If financial institutions are heavily reliant on structured products, a significant decline in the demand for these products, as experienced after the financial crisis of 2007-08, could lead to funding pressures, as issuers would not be able to find retail investors willing to invest in SRPs.

The realisation of those risks would therefore hamper the funding of financial institutions, resulting in a reduction of the credit supply as, according to structuredretailproducts.com, banks account for 90% of the volumes sold, insurance companies for 5% and funds and other types of distributors for the remainder.

<sup>14</sup> The wealth effect is the extent to which a decrease in the value of financial wealth leads to a reduction in household consumption. For example, a wealth effect of 10% means that a decrease of €100 in financial wealth results in a reduction of €10 in household consumption.

<sup>15</sup> Some European countries are not reported here as no data for them were available in the commercial database used.

Taking a sample of banks which are among the main sellers of structured products in Europe, it appears that for some of them, these products represent a significant share of their total liabilities (up to 15%) and up to 50% of deposits and 30% of total debt. However, there are significant differences across countries and banks, implying that the use of SRPs by banks for funding purposes may be more limited at the European level.

The issue of systemic risks arising from the funding of financial firms goes beyond the scope of retailisation (and the present Commentary) as it is also related to the wholesale market and the use of central bank facilities.

## 5 CONCLUSION

This Commentary presents a high level analysis of the potential systemic risks in relation to the distribution of complex products to retail investors and the different possible channels of contagion. Work is currently taking place at European and international level to better define complex products and review the effectiveness of the different applicable regulatory regimes.

At this stage, the analysis shows that retailisation is still unlikely to generate systemic risks through the household channel in the short run. However, the banking channel could have the potential to transmit systemic risks through the financial sector, at least in countries whose banks are highly reliant on SRPs for funding purposes.

On the household channel side, it is important to monitor the distribution of complex products to retail investors<sup>16</sup>. Trends such as the rapid development of complex strategies under the UCITS label should also be monitored going forward. It is important to carefully consider not only the issue of the possible mis-pricing of structured retail products (which might be linked to their opacity), but also the fact that such products tend to be illiquid and that mis-selling may occur.

Concerning the banking channel, the issue of bank funding is particularly relevant for further analysis of the possible systemic risks involved, as is interconnectedness.

Ongoing initiatives at the European level aimed at improving the transparency of retail financial products such as the forthcoming PRIPs initiative, accompanied by the current review of the Markets in Financial Instruments Directive (MiFID), could mitigate the risks entailed by the purchase of complex or unsuitable investment products by retail investors. This would reduce the systemic risks linked to the household channel.

Finally, the analysis in this Commentary has also shown some limitations in the data currently available. As there are no EU-wide statistics for all complex products, it might be necessary to consider the implementation of such EU-wide statistics in order to better assess potential (systemic) risks originating from complex products.

---

<sup>16</sup> See also the ESRB press release from 21 September 2011 on this issue.