

Special features

A Overcoming non-performing loan market failures with transaction platforms

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When banks judge that more value can be extracted by offering non-performing loans (NPLs) for sale rather than working them out themselves, potential investors cannot be sure that the credit quality of the assets is as good as the banks portray it to be. Such information asymmetries in the NPL market drive a wedge between the prices that investors are prepared to pay for NPLs and the prices that banks are prepared to sell them for. While information asymmetries can be overcome through investor due diligence, this requires specialist expertise and the costs of valuing NPL portfolios can be very high. As few investors have the resources to absorb such costs, barriers to entering the market are compounded. This appears to explain why the euro area NPL markets display the features of an oligopsony, a situation where there is a concentration of market power among a limited number of investors, which pushes traded prices even lower. At the same time, potential NPL investors can face coordination challenges when debtors have multiple loans with different banks. In such situations, investors must face the prospect of competing with other creditors for the debtor's resources. While coordination between banks for common exposures may alleviate this problem, this too can be costly, weighing further on market prices. By offering the prospect of greater transparency in NPL markets, fostering wider investor participation and addressing coordination issues, NPL transaction platforms could help in overcoming all three of these market failures. The attendant improvement in market liquidity would allow banks to achieve better prices for NPL sales, preserve their capital and mitigate financial stability risks. This special feature outlines the desirable features of NPL transaction platforms and discusses their operational implementation.

Introduction

Transaction platforms are being considered as a possible solution to Europe's high stock of non-performing loans. The total gross volume of non-performing bank loans in the European Union (EU) stood at about €1.3 trillion at end-March 2017, of which €921 billion were on euro area bank balance sheets. The corresponding NPL ratios were, respectively, 5.1% and 6.1% of total loans.¹¹⁵ There are several impediments to the resolution of the NPL stock, arising from both

¹¹⁴ The authors wish to posthumously acknowledge the contribution of Charlie Fell in the formation of some of the concepts and arguments outlined in this special feature.

¹¹⁵ These data are derived from the ECB Consolidated Banking Data.

demand and supply sides of the secondary markets for NPLs.¹¹⁶ A comprehensive policy response to this high stock of NPLs was formulated by the Economic and Financial Affairs Council (ECOFIN Council) in July 2017, drawing on the analytical work carried out by the Financial Services Committee.¹¹⁷ The action plan announced by the EU Council covers several domains: banking supervision, macroprudential policies, secondary markets for NPLs and insolvency frameworks. As proposed by Constâncio (2017), the action plan also covers initiatives aimed at fostering the growth of secondary markets, with the EU Council inviting the European Commission, the ECB and the European Banking Authority to “strengthen the data infrastructure with uniform and standardized data for NPLs and consider the setting-up of NPL transaction platforms”.¹¹⁸ The European Systemic Risk Board (ESRB) also proposed that a “trading platform which banks can use to reach investors when they wish to dispose of portfolios of NPLs must be specified”.¹¹⁹

There are a number of reasons why banks should dispose of, and not continue to hold NPLs, once stocks reach a critical mass. NPLs can tie up scarce bank resources, including capital, funding and human resources, diverting them from more profitable activities or opportunities, with overall negative consequences for a bank.¹²⁰ Large NPL stocks may also impact bank funding costs, as a result of uncertainty surrounding the future prospects of the institution; see, for example, ESRB (2017).

A transaction platform could offer a central marketplace for NPLs, bringing together banks and investors. Clarity about objectives is crucial in designing a platform. First, its scope could vary, from a data warehouse solution which would provide transparency around NPLs, to covering the entire transaction process. Further decision points include the choice of asset classes, the mode and perimeter of banks’ participation, and the nature of the data collected on the platform. Moreover, the platform could offer ancillary services which would support investors in conducting due diligence and closing transactions.

The platform could play a complementary role among several strategies used to facilitate the acquisition of NPLs by private investors. Other instruments, already discussed in past issues of the FSR, include asset management companies (AMCs) and securitisation.¹²¹ The platform may offer an outlet for AMCs to sell their exposures and may also support securitisation by providing transparency around the

¹¹⁶ See “Resolving NPLs in Europe”, European Systemic Risk Board, July 2017.

¹¹⁷ See “Council sets out action plan for non-performing loans”, press release, 11 July 2017, and “Report of the FSC Subgroup on non-performing loans”, July 2017.

¹¹⁸ See Constâncio, V., “Resolving Europe’s NPL burden: challenges and benefits”, keynote speech at “Tackling Europe’s non-performing loans crisis: restructuring debt, reviving growth”, Brussels, 3 February 2017. See also Fell, J., Grodzicki, M., Martin, R. and O’Brien, E., “A Role for Systemic Asset Management Companies in Solving Europe’s Non-Performing Loan Problems,” *European Economy: Banks, Regulation and the Real Sector*, 17(1), 2017.

¹¹⁹ ESRB (2017), op. cit.

¹²⁰ It should be noted that not all NPLs should be characterised as unprofitable. It may be the case, for example, that a loan is producing substantial cash flow, despite being in arrears.

¹²¹ See Fell, J., Grodzicki, M., Martin, R. and O’Brien, E., “Addressing market failures in the resolution of non-performing loans in the euro area”, *Financial Stability Review*, ECB, November 2016, pp. 134-146, and Fell, J., Moldovan, C. and O’Brien, E., “Resolving large stocks of NPLs: a role for securitisation and other financial structures?”, *Financial Stability Review*, ECB, May 2017, pp. 158-174.

NPL pools, with securitisation being one of the possible financial structures used to fund the transactions.

Crucially, an NPL transaction platform has the potential to mitigate a number of market failures which appear to be in evidence in the secondary market. All three textbook causes of market failure – transaction costs and information asymmetries, bargaining problems, and insufficient control – may manifest themselves in the NPL market. To that end, this special feature is structured as follows. Section 2 reviews the various market failures that plague the secondary market for NPLs in the euro area, and Section 3 discusses how a platform can contribute to overcoming these problems. An operational concept for an NPL transaction platform is presented in Section 4. Section 5 describes the roles of various stakeholders in establishing a platform. Section 6 concludes.

Market failures in the euro area secondary NPL market

Fell et al. (2016) described a number of indicators of market failure in the secondary market for NPLs, characterising the situation as symptomatic of a so-called “market for lemons”.¹²² Available transaction data confirm that the market suffers from low liquidity – despite evidence from market intelligence suggesting strong demand to meet the known supply of NPLs – and wide bid-ask spreads, i.e. the differences between the prices that investors are prepared to pay for NPLs and the prices that banks are prepared to sell them for.^{123, 124, 125} Such bid-ask spreads are, by definition, unobservable but Chart A.1 illustrates two key determinants of the total bid-ask spread associated with an NPL sale, using the World Bank Doing Business database. The blue segments of the bars represent the reported average cost of enforcing claims through individual legal systems,¹²⁶ whereas the yellow segments represent the additional discount that results from using an internal rate of return (IRR) of 15%, assumed to represent the premium required by investors for the risk of acquiring NPLs. This is at the lower end of the 15-25% range of IRR assumptions which Ciavoliello et al. (2016) suggest investors

¹²² Ibid.

¹²³ According to Deloitte, the total volume of loan sales – including also transactions in performing assets – amounted to about €160 billion between January 2015 and June 2017, which is a small fraction of the NPL stock (over €1 trillion) or the estimated stock of non-core assets (over €2 trillion).

¹²⁴ Available data on European loan portfolio sales, of which NPLs are a sub-set, indicate that while the pace of transactions has picked up, the improvement remains modest. For the first half of 2017, €42 billion in deals were concluded, with a further €37 billion of deals ongoing, but yet to be closed. The comparable total for 2016 was €103 billion, while the market may be as large as €2 trillion. See, for example, *Shifting momentum: regulation driving change in European loan portfolio markets*, Deloitte, 2017.

¹²⁵ Anecdotal evidence also continues to suggest that NPLs that do trade in the market are frequently unsecured assets, the value of which has already been substantially written down by the originating bank. This supports the “market for lemons” hypothesis in this context.

¹²⁶ Under IFRS (IAS39 AG84), a part of that cost, for example related to the cost of foreclosing on collateral, should be recognised in the book value of NPLs. However, a part can be recognised as an expense on a pay-as-you-go basis.

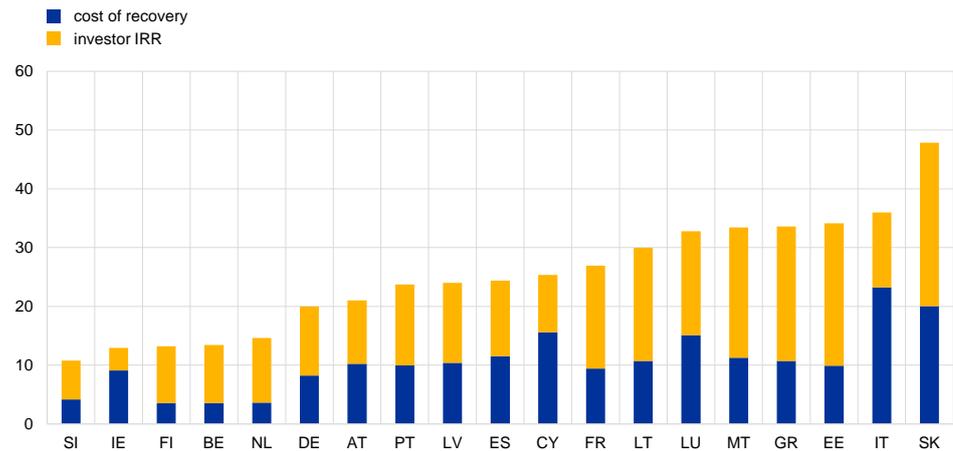
seek to acquire bad loans.¹²⁷ Even for a 15% IRR assumption, however, the resulting spread is likely to exceed 30% in several euro area countries.

Chart A.1

A wide bid-ask spread arises from the intransparency around NPL values and the cost of recovery

Difference between the net book value and the estimated bid price of a sample of collateralised NPLs

(percentage of book value)



Sources: ECB calculations based on the World Bank's *Doing Business 2017* and ECB data.

Notes: The cost of debt recovery includes court fees and government levies; fees of insolvency administrators, auctioneers, assessors and lawyers; and all other fees and costs. It does not include operational expenses incurred by the creditor, such as wages and salaries of involved staff members, or the cost of IT infrastructure used to manage NPLs. Inclusion of these costs would reduce net present values even further.

The potential sources of market failure are well documented in the microeconomic literature.¹²⁸ Three causes are typically cited: **(1) information and transaction costs**, sometimes referred to as the nature of the exchange; **(2) bargaining problems**, which may also be considered as market structure issues; and **(3) insufficient control** – imperfect excludability and non-transferability – which may be alternatively referred to as the nature of the commodity. While typical market failures arise as a result of one of these factors being present, it may be the case that in the market for NPLs, all three of these factors play a role; furthermore, their interaction may also induce market dysfunction.

Akerlof's "market for lemons" was invoked by Fell et al. (2016) as a possible explanation for wide bid-ask spreads and apparent market failure in the NPL market.¹²⁹ This failure relates to **information and transaction costs**. It is well known that, in general, banks' NPL-related data tend to be insufficient, both in

¹²⁷ See Ciavoliello, L. G., Ciocchetta, F., Conti, F. M., Guida, I., Rendina, A. and Santini, G., "What is the value of NPLs?", *Notes on Financial Stability and Supervision*, Banca d'Italia, April 2016. There are sound economic reasons why investors use higher discount rates for valuing NPLs than banks. NPL investors usually have higher costs of capital than banks and different contractual positions.

¹²⁸ See, for example, Gravelle, H. and Rees, R., *Microeconomics*, Prentice Hall Financial Times, 2004.

¹²⁹ See, for example, Akerlof, G., "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics*, Vol. 84(3), 1970, pp. 488-500.

quantity and in quality.¹³⁰ A number of factors may drive banks' intransparency around NPL holdings. For example, banks may not feel that transparency is warranted in cases where loan performance may recover and underlying collateral values may increase. Rather than fully recognising the consequences of falling asset values and increased impairments, banks may hold out for recovery. Even if this were not to be the case, banks may prefer not to fully reveal their true balance sheet strength, as declining asset values in certain portfolios may spill over to other portfolios, with possible implications for capitalisation, costs of funding and the cost of equity. Asymmetric information problems may arise, as investors may have less information about a given exposure than a selling bank.¹³¹ From the investor perspective, in the absence of sufficient data, accurate valuations are difficult, which may result in low bid prices. Linked to this, further uncertainty may result for investors from a lack of clarity about access to collateral, the time it may take to realise that collateral, and the potential costs incurred in the process. Uncertainty in this regard will be reflected in bid prices.

In keeping with the “lemons” outcome, banks may therefore be incentivised to offer only their worst assets for sale, rather than selling better-quality assets at prices which would undervalue them. The result of this market failure – a “lemons” outcome – may be a suboptimal demand-supply equilibrium, both in terms of price and quantity traded. This partly explains the wide bid-ask spreads, as well as the low level of liquidity in the market.

Market intelligence suggests that bargaining problems also exist in the NPL market. Banks with high stocks of NPLs are observable and well known and they face various pressures to reduce these stocks. Looking at the demand side, however, although in principle there could be many potential investors for these assets, a few large firms dominate the market in Europe, giving that market the characteristics of an **oligopsony**, where a limited number of buyers exert market power. During 2015-17, a total of 67 investors were active in the secondary NPL market in the EU. The maximum number of investors in any given country and asset class, however, never exceeded 14 (see Table **A.1**). Moreover, the top 10 investors in EU NPL markets accounted for 60% of transactions by volume, with the relative market concentration being similar across individual countries (see **Chart A.2**). Similar to other market structures with dominant participants, **barriers to entry** play a significant role in firms acquiring and maintaining their oligopsony.

¹³⁰ For some examples, see “[Stocktake of national supervisory practices and legal frameworks related to NPLs](#)”, ECB, 2016.

¹³¹ It may be the case that information asymmetries do not arise, as banks may be as uninformed as potential investors about a given exposure, due to poor-quality data. Investors, however, may not be able to deduce whether or not a selling bank has an informational advantage or not.

Table A.1

European NPL markets are fragmented, with few buyers active in individual market segments

Number of buyers participating in secondary market transactions in loans, per country and asset class

(2015-17)

	BG	DE	ES	GR	HR	HU	IE	IT	NL	PT	RO	SI	EU (per segment)
Asset finance	0	2	0	1	0	0	0	0	0	0	0	0	3
Consumer	1	0	5	0	0	1	0	10	0	0	1	0	16
Corporate	0	0	5	0	1	0	2	7	0	0	2	2	18
CRE	0	7	3	0	0	0	11	10	7	0	0	0	27
Mixed	1	2	4	1	0	0	0	14	1	0	2	0	22
Mortgage	0	0	2	0	0	2	4	3	5	0	1	0	17
RED	0	0	11	0	0	1	0	0	0	1	0	0	12
All asset classes	2	11	18	2	1	4	13	32	13	1	5	2	67

Sources: ECB calculations based on Deloitte data.

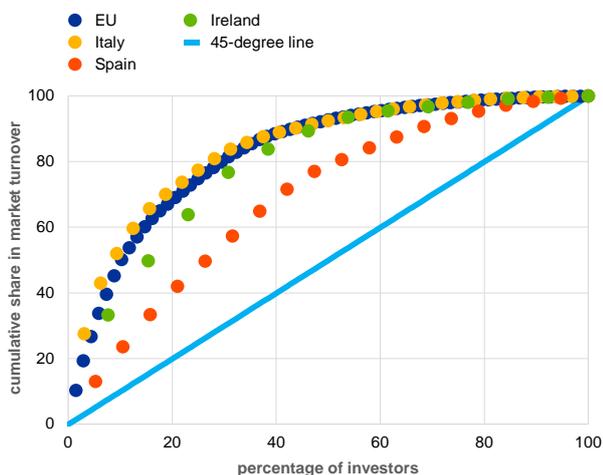
Notes: The database covers 199 secondary market transactions where the name of the buyer was reported, accounting for €153 billion in terms of the gross value of loans. CRE: commercial real estate; RED: real estate development. The darker the shading of a cell, the greater the number of investors which are active in a particular country and market segment. Transaction data for Portugal may not be representative owing to non-disclosure of the buyer for several transactions.

Chart A.2

Turnover in the secondary market is dominated by a few large investors

Cumulative market share of investors in the secondary market for loans

(2015-17)



Sources: ECB calculations based on Deloitte data.

Notes: The database covers 199 secondary market transactions where the name of the buyer was reported, accounting for €153 billion in terms of the gross value of loans. The 45-degree line denotes a theoretical situation where all investors would have an identical market share. Total number of investors: EU – 67, Italy – 32, Spain – 18, Ireland – 13.

In the NPL context, these barriers to entry are likely to relate to an established capacity to value impaired assets and conduct the necessary due diligence.

The due diligence process entails reviewing individual loan files, together with the accompanying legal documentation and the history of the relationship. These data, often existing in paper form only, should be put into an IT system. Then, loan valuation can be performed, often using complex models. The associated (sunk) costs and experienced resources needed to perform due diligence on the underlying loan tape tend to be large. Moreover, these costs are unrecoverable for all except the winning bidder. Even where investors are willing to pay the entry costs, the poor quality of NPL data can compromise the results of valuation methods that investors use in their due diligence, resulting in heightened uncertainty about asset values (i.e. higher discount rates applied by a new investor than by an established investor). Barriers to entry may also relate to the absence of access to local servicing platforms.¹³² In some jurisdictions, rent-seeking behaviour on the part of many stakeholders in a sale drives up costs and, therefore, drives down bid

¹³² Loan servicing means the administration of a loan, including the collection of principal and interest payments on behalf of the creditor. In the context of NPLs, loan servicing involves working out the loan, for example by modification of the payment terms, foreclosure or repossession of collateral. While many banks use internal servicing, availability of independent third-party servicing is often a precondition for the development of secondary markets for loans.

prices.

In addition, established investors enjoy a market-power premium which can widen the spread even further. Benchmarking with comparable transactions is almost impossible for external investors, leading to substantial insider advantages for established investors with market-specific expertise and a record of past transactions.

Finally, insufficient control may further impair market functioning. This market failure has two aspects: **imperfect excludability** and **non-transferability**. In the NPL context, imperfect excludability can arise from the fact that a bank or potential investor may only have recourse to collateral underlying a non-performing loan, even though a debtor may have other resources and other performing loans. In the context of lending to firms, it may be the case that multiple banks have extended credit to the same debtor and cross-collateralisation may occur. A potential investor in an impaired loan must face the prospect of competing with other creditors for the debtor's resources – insofar as they can be accessed – in order to recover value on the asset; the problem may be further exacerbated where debtors have lent against personal guarantees. While coordination between banks for common exposures may alleviate this problem, coordination challenges and costs will arise. Apart from the time and costs incurred in coordinating these exposures, banks with performing exposures may have no incentive to coordinate with banks holding non-performing exposures to the same client. Imperfect excludability and the challenges of coordination may also be reflected in lower bid prices than would be the case without coordination challenges.¹³³

Non-transferability may also impact market activity. In some jurisdictions, restrictions are in place, for example, through licensing requirements or consumer protection codes of conduct, which may limit the acquisition of some NPLs. This may also exacerbate bargaining problems, as potential investors may be excluded from the market, or at least face barriers to entry, thereby increasing transaction costs.¹³⁴

An NPL transaction platform as a means to overcome market failures

An NPL transaction platform could help overcome the sources of market failure and induce new investors to enter the market. The platform – an electronic transaction system combined with a data warehouse and trade repository, easily accessible to buyers and sellers alike – could contribute to the growth in NPL trading by increasing transparency around NPLs, reducing transaction costs, and

¹³³ The National Asset Management Agency (NAMA), an asset management company established in Ireland in 2010, overcame imperfect excludability problems by taking a “debtor approach” in acquiring assets from participating banks. For a given debtor with an exposure to the relevant asset perimeter established by the agency, all other assets, both performing and non-performing, within the bank perimeter were transferred to NAMA, so that it could exert full control over the debtor's exposure.

¹³⁴ Barriers to entry may arise as a result of the cost of acquiring a necessary licence, or the time it may take to become licensed. In extremis, for example, the costs of acquiring a banking licence and meeting regulatory requirements represent a significant barrier to entry.

resolving the coordination problems that arise from multiple creditors having a claim on a specific borrower and the resulting problem of imperfect excludability.¹³⁵ These benefits should lead to an increase in investor interest and, in particular, the NPL market being opened up to new investors. The latter point is crucial, as wider investor participation may have a number of important benefits that result in lower bid-ask spreads: price competition in the market may be increased and investors with lower risk tolerance (measured by IRR targets) may enter the market.¹³⁶

One of the main functions of an NPL transaction platform is to mitigate the information asymmetry between banks willing to sell NPLs and potential investors.

A standard solution to the asymmetric information problem is to establish an independent data provider which would be responsible for certifying and auditing data about the quality of individual items in the marketplace. The NPL transaction platform can fulfil that role by collecting data from banks and disseminating them, at low cost, to possible investors. To perform this task efficiently, the platform could utilise standardised and thus comparable data templates and collect the relevant documentation.¹³⁷ It could then validate the data, possibly relying on external service providers. The platform could also provide access to independent valuation tools and provide transaction price data to users for benchmarking purposes. If the platform were to be extended to also conduct NPL transactions, it could standardise the transaction process, manage the bidding process and offer transaction services. In doing so, transaction costs may be reduced, thereby lowering barriers to entry.

An NPL platform can substantially lower the costs of investors' due diligence by standardising loan data tapes and allowing a wide pool of interested investors to access them.

First, it can act as a consolidator of data, e.g. by requesting that participating banks use standard data templates for NPLs. Second, it can be a single point of contact for potential investors, enabling them to package NPLs originated by multiple banks without having to approach them individually. Although improved transparency and reduced “shoe-leather” costs for investors cannot be expected to increase distressed asset prices significantly, it could help to narrow bid-ask spreads and increase sales. In particular, it would reduce the sunk cost of due diligence by allowing investors to review the assets in a cost-efficient manner through data standardisation and, possibly, offering data analytics and valuation services. Crucially, this should attract a wider investor base; if this can be achieved, price competition should increase, putting further upward pressure on prices. In addition, similar to an AMC, the platform can have a positive impact by overcoming the inaction bias which the originating bank may have, as it may be focused on protecting the relationship with a client rather than recovering overdue claims.

¹³⁵ The scope of the platform may be restricted to the provision of information about NPLs. However, this would reduce the possible benefits as investors would be left to negotiate transactions with individual sellers.

¹³⁶ The IRR includes a risk premium, which covers all risks related to the expected cash flows from an investment. Improved transparency and data quality lower the risk premium imposed by the investor and increase the price the investor is prepared to pay for the asset.

¹³⁷ Work on data standardisation was referred to in the EU Council's NPL action plan and is being undertaken primarily by the European Banking Authority.

Finally, the NPL transaction platform can help overcome the imperfect excludability and creditor coordination problems by granting investors access to all banks' exposures to a troubled debtor.¹³⁸ Instead of having to search for these exposures across several lenders, and then conclude bilateral deals, an investor would be able to find and purchase the relevant exposures on the platform.¹³⁹ The investor could easily acquire a majority stake in the debtor's liabilities. In turn, where permitted by insolvency legislation, this investor can implement a restructuring solution for the debtor which would bind the remaining minority creditors.

Taken together, this suggests that an NPL transaction platform could arrest and reverse the negative dynamic that may result from market failures, as alluded to in the previous section. By bringing transparency to the marketplace and reducing transaction costs, barriers to entry can be lowered, and a wider and more diverse investor base can be brought to the market, increasing price competition and resulting in a deeper and more liquid market.

Features of an NPL transaction platform

In practical application, data, trading and servicing form the key features of a transaction platform. Figure A.1 presents the main elements of a transaction platform which are necessary to fully exploit its potential advantages. The data function offers the investors transparency, and should address the level and scope of information, the degree of data harmonisation and standardisation, as well as data validation services. The trading function provides the space to execute transactions. Availability of independent servicing is yet another key condition for the success of the platform. Taken together, these elements would help tackle the three sources of market failure. Additional roles of the platform, such as intermediation with external service providers, may offer synergies with the data warehouse and trading function.

First, the platform must collect loan-level information. NPL portfolios, especially in corporate and commercial property business, are highly diverse. While investors may be willing to purchase and value them at the portfolio level, this usually leads to a discount in comparison to a loan-by-loan valuation approach, for example, owing to the specialisation of investors in recovering value from certain types of loans.¹⁴⁰

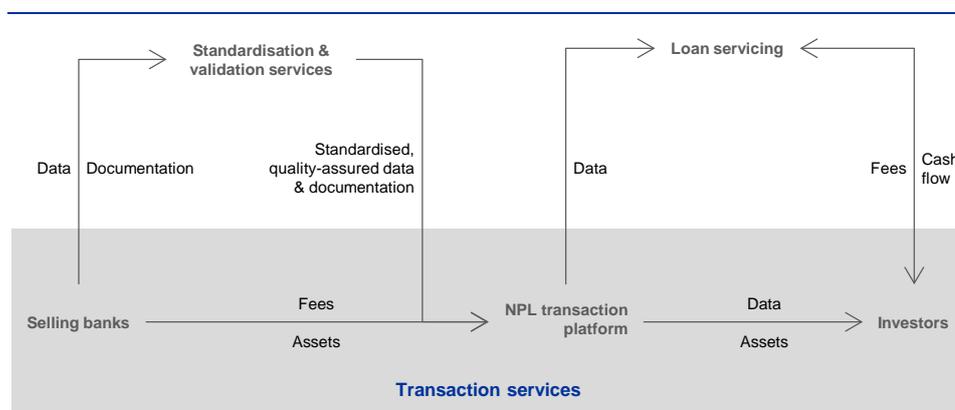
¹³⁸ While the concept outlined here is for a fully fledged transaction platform, less ambitious schemes could also be envisaged, and progress has already been made in this regard in some European jurisdictions.

¹³⁹ Bank secrecy laws and regulations may pose an obstacle to disclosure of the relevant information via the platform. This obstacle could be overcome by obtaining borrowers' consent to disclosure, which is more likely to be feasible for new loans, or by dividing the due diligence process into two stages. In the first stage, anonymised data could be made available to all interested parties. More detailed data would be distributed only in the second stage, to those investors that decide to bid for an asset based on the results of the first stage.

¹⁴⁰ Anecdotal evidence suggests that this mechanism is relevant for many banks, which due to insufficient information about their NPLs are unable to segment the NPL portfolios and, instead, sell mixed portfolios at a discount.

Harmonised data templates for loan tapes are an essential element of the platform. Comparability of NPL data across banks is hardly possible, and data definitions used by individual banks are often bespoke. Until 2014 there was no agreement across EU countries on what constitutes a non-performing loan and, even now, many banks use different NPL definitions for internal management purposes. The scope of the data collected and analysed by individual banks also varies. An NPL investor is therefore faced with a new data challenge every time it considers transacting with a new bank. The platform would overcome these challenges by imposing a standard scope and data definition on every bank in the system.

Figure A.1
Concept of an NPL transaction platform



Source: ECB.

The scope of NPL information must go beyond purely financial data. Even more than in the case of performing portfolios, the valuation of NPLs depends critically on qualitative information. This may concern the legal position of the lender vis-à-vis the borrower, the (non-)cooperative attitude of the borrower, the past history of interactions with the borrower, or qualitative information on collateral. A loan's legal documentation plays a particularly important role in determining the workout approach and, ultimately, also the range of recovery options. The platform should therefore act as a repository of key documents. Where possible, it could extract critical qualitative information from these documents and present it, in a transparent and standardised format, to the prospective investors.

Independent validation of the reported NPL data would be a key function of the transaction platform and may require sizeable upfront investment. The platform would inspire trust if, and only if, the data it provides to potential investors are of the highest quality. It could engage independent service providers, such as auditors, to inspect the quality of the data. At the current juncture, raw loan tape data typically do not achieve the necessary quality standard. With supervisory and market pressures increasing, high-NPL banks are, however, in any case expected to improve the quality of their loan-level information. This is also in their best interest when considering a sale. Even if the actual validation would be done by the platform, the cost would need to be borne by the banks.

To be fully realised, the concept of the transaction platform must be extended beyond the data provider function to a trading platform. The centralised data provider may be well placed to intermediate between the sellers and the buyers of NPLs, as it enters into a business relationship with both parties. The marginal cost of intermediating between the parties and offering transaction services would be limited and this may be more efficient than the bilateral conclusion of transactions outside the platform. The buyers could choose individual portfolios or even single loans from all participating banks, allowing them to build their own, bespoke NPL portfolios. The platform may also consider operating an auction system, where the sellers could post their reservation price and buyers may either accept it or bid it down.

The platform may combine the data and transaction services with further, ancillary services. There may be business opportunities for the platform to partner with providers of valuation services, and offer its own valuation models directly to participating buyers and sellers, similar to the products offered by many financial market data providers. Cooperation with legal, real estate and advisory firms could also be part of the bundle of services facilitated by the platform.

Banks should be incentivised to make use of an NPL transaction platform as a means to reduce large stocks of NPLs. The precise nature of the incentives may depend on the jurisdiction in which the platform is established, but they could, for example, be taxed-based in nature.

Operational implementation of an NPL transaction platform

The operational implementation of an NPL platform would benefit from the development of a “blueprint”, which could provide some common terms of reference valid across the EU Member States. Similar to the AMC blueprint, which is currently being developed by the European Commission in close cooperation with the ECB and other European institutions, such a blueprint could help interested parties to speed up the design and practical establishment of an NPL platform. The main practical aspects to be covered are related to the scope, participation, funding model, governance, regulation and the role for the public authorities.

The role of the authorities in setting up an NPL platform should essentially be limited to regulation, support during the start-up phase and incentivising participation. A key advantage of an NPL platform is that unlike a traditional, systemic AMC, state aid is not necessary to set it up and support its operations.¹⁴¹ Moreover, the set-up costs for a platform should be relatively low. Rather, the platform may be seen as a utility, provided on commercial terms to market participants. The authorities would lay down the legal foundation for the operations of the platform, facilitate access to existing public information and encourage participation.

¹⁴¹ See “[Market-based solutions to bank restructuring and the role of state aid control: the case of NPLs](#)”, speech given by Gert Jan Koopman, Deputy Director-General, DG Competition, European Commission, at the ECMI Annual Conference, Brussels, 9 November 2016.

The platform could be set up by the banks that intend to use it for placing NPLs on the secondary market, thus following the example of the European Data Warehouse. It could also be set up and run by a third-party market provider, or by an existing market servicer of NPLs.¹⁴² However, regardless of the ownership and operation models, the platform should be open to all interested banks and investors. This would require that access to the platform and the cost of using it be regulated to ensure that the platform cannot exercise monopolistic powers. It is not necessary, and for governance reasons not even preferable, that the state takes an ownership stake in the platform.

The authorities can sponsor the creation of an NPL transaction platform, acting to deliver a public good. In the securitisation markets, the ECB acted in the public interest to increase the transparency of the asset pools underlying European asset-backed securities by fostering the European Data Warehouse initiative.¹⁴³ A similar catalyst role could be played by the authorities in the NPL markets. However, the securitisation markets have not been successfully revived, owing to a combination of factors: the increased availability and reduced cost of other funding instruments to banks, uncertainty around the future shape of regulation and regulatory disadvantages of securitisations versus other instruments. This experience shows that transparency around assets may be a necessary but not a sufficient condition for establishing a well-functioning secondary market for loans.

The authorities may, therefore, need to review and amend regulations that impact the operations of the transaction platform. First, the role of the platform as an aggregator of various publicly available data (e.g. from property and corporate financial information registers) may require amendments to the regulations governing access to such data. Importantly, given that the platform would be processing commercially sensitive and possibly personal data, it may face obstacles arising from data protection regulations in these areas. Selling banks would also need assurances that competitors or potential investors in bank equity or debt could not access the platform's data with a view to gaining broader insights into a bank's asset quality. The role of the authorities would be to balance confidentiality requirements in these fields with the operational requirements of the platform and its clients. To overcome the challenges that relate to non-transferability, regulations concerning licensing and ownership should also be reviewed to ensure an appropriate balance is struck between stimulating markets and protecting debtors.

The platform should be run to the highest standards of governance, in particular to avoid conflicts of interest. Although market participants are expected to play a substantial role in the ownership structure of the platform, their individual impact on the business operations of the platform should be limited. The platform should offer a level playing field for buyers and sellers, including potential sellers of NPLs that decide not to become owners of the platform. In particular, any preferential

¹⁴² For example, a major online auction provider arranged NPL sales in China. See, for example, "China's Huarong plans \$8 billion bad loan sale, biggest in five years", Reuters, 15 December 2015.

¹⁴³ The European Data Warehouse (EDW) is an industry-led central data warehouse collecting, validating and disseminating loan-level data for asset-backed securities transactions. It is not a transaction platform.

access to the platform by owners would be severely damaging to its credibility.¹⁴⁴ An arm's length relationship should be established, with adequate checks and balances.

Participation in an NPL platform should be open to all interested investors and to all holders of NPLs. Synergies offered by an NPL platform, such as the consolidation of debt owed by a given borrower (known as the “single borrower principle” in the case of AMCs), could be best reaped when there is a broad participation of creditors. By contrast, a limited take-up of the platform's services by banks holding NPLs may be contrary to the objective of resolving the creditor coordination problem. Hence, incentives for participation by creditors or the use of moral suasion could be considered. Participation could even be open to non-bank creditors, such as bondholders, leasing companies or factoring companies. On the investor side, the platform should ideally be open to all potential buyers of NPLs.

An NPL transaction platform could play a role in promoting securitisation as a tool in NPL resolution and could facilitate divestment by national AMCs. Fell et al. (2017) outlined a securitisation scheme for NPLs which foresaw a role for the state in co-investing in such a structure, thereby reducing risk for investors.¹⁴⁵ While an NPL transaction platform would greatly facilitate securitisation through the provision of adequate data and the provision of ancillary services, including loan servicing, banks could be incentivised to participate in such a platform if the state were to make platform participation a prerequisite for co-investment. With respect to AMCs, such an entity could also choose to participate in the platform, which it could likely do with relative ease, to improve its outreach to potential investors. Under such an arrangement, investors would have the potential to acquire assets from banks and an AMC with reduced transaction costs.

The costs of operating the platform should be borne by the industry. The platform is likely to be a light operation, incurring only limited operating costs, which should be covered by access fees paid by both buyers and sellers.¹⁴⁶ Establishing the platform may, however, require a substantial upfront fixed investment. In particular, the initial cleaning and validation of data may require sizeable expenses, which should be borne by the sellers of NPLs.¹⁴⁷ It is important to make sure, however, that the fees charged by the platform do not become a barrier to entry to the NPL market.

The NPL platform concept is potentially applicable to a broad range of asset classes and jurisdictions. There is, however, a potential trade-off between the scope of asset classes covered by the platform and the width of the information

¹⁴⁴ In the case of the EDW, where the owners are banks, the governance structure is such that they exert very limited power over the day-to-day operations of the EDW platform, and access is open to all interested parties. Proper governance is enhanced by external board counselling by the ECB.

¹⁴⁵ Ibid.

¹⁴⁶ For example, the EDW provides the basic access to investors free of charge, and charges up to €20,000 per annum for more sophisticated products and services. Data providers pay a one-off fee charged at the inception of the deal, followed by an annual fee per transaction serviced by the EDW. Both of these fees are set between €6,000 and €8,000. The fees are set on a cost-plus basis.

¹⁴⁷ These costs would anyway be borne by a bank disposing of NPLs, either in the form of costs to prepare data for due diligence or as losses incurred in selling assets at a discount to account for insufficient data.

requirements. On the one hand, the platform may be attractive to potential investors in non-financial corporations, as it could reduce the cost of finding acquisition targets and provide a view of the full spectrum of debt of a company. On the other hand, the platform may facilitate the disposal of granular portfolios, including even performing portfolios, if servicing of these portfolios can be arranged. The information required for various asset types would differ and the platform should cater for the information needs relevant for its particular “in scope” asset classes. A similar trade-off applies to a cross-border platform. Investors may achieve the benefits of diversification on a platform which would pool assets from several jurisdictions. However, a multi-country (possibly EU-wide) platform would also need to take into account the specific national data needs.

Concerns about disclosing sensitive information to a broad range of investors may hold back the implementation of the platform concept.

These concerns relate to the impact of transparency on the pricing of bank equity and debt, and to the protection of personal data. Regarding the first, banks may be reluctant to open up their NPL books to prospective investors, which are often active in equity and debt markets. From the consumer protection and bank secrecy angles, data protection rules may not allow for full transparency. Data-sharing may, moreover, require amendments to existing loan contracts. These two types of concerns could be mitigated by a two-step process, where a limited set of anonymised data would be disclosed to all participants in the platform in the first step. A full set, including where possible unanonymised data and legal documentation, would then be made available, subject to appropriate confidentiality constraints, to those who express a firm interest in a specific exposure, possibly after having been shortlisted in the bidding process.

Concluding remarks

The secondary market for NPLs in the euro area currently suffers from several market failures.

This results in an oligopsonistic market with a limited number of large buyers. Transaction volumes and prices thus tend to be below what could be expected in a fully competitive market. An NPL transaction platform could alleviate these market failures by standardising and validating loan-level data, reducing due diligence costs and hence increasing the number of potential investors in the market. Further analysis is required to assess the feasibility of the platform concept, especially concerning the impact of data protection and bank secrecy rules.

The EU Council and the ESRB have recently stated the potential usefulness of NPL platforms.

They can form part of the comprehensive solution to the euro area NPL problem, complementing other tools such as AMCs and internal workout by banks. Unlike AMCs, they do not require significant financial aid from the state, thus avoiding possible state-aid issues. In fact, the role of the authorities may be limited to the regulatory amendments needed to facilitate the operation of such a platform. Platforms may be potentially useful for a range of asset classes and participation should be open to all interested holders of and investors in NPLs.

To realise its full potential benefits, the platform would need to be supported by structural changes aimed at expanding the NPL investor base, such as relaxing licensing requirements and fostering the growth of independent loan servicing. In some European jurisdictions, the investor concentration is reinforced by licensing and other compliance requirements imposed on prospective NPL investors. The entry of new investors into the NPL market is also further limited by the lack of an efficient third-party servicer market in many EU countries. For servicers, accessing a new market takes time and requires upfront investment, which may become a sunk cost if a successful deal is never concluded. This, in turn, deters smaller NPL investors without country expertise and their own servicing capacity.