B ASSET SUPPORT SCHEMES IN THE EURO AREA[1]

Asset management companies (AMCs) have been established in a number of euro area countries to resolve large stocks of impaired bank assets following the financial crisis. This special feature describes some of the fundamental characteristics of such entities from a financial stability perspective. In particular, it reviews some of the lessons learned from the AMCs' establishment and early operations, notably regarding the eligibility of banks and assets, which has implications for the size and capital structure of an AMC, as well as the valuation of assets to be transferred, strategies for their management and disposal and other operational issues.

INTRODUCTION

Asset management companies have been created to deal with stocks of impaired assets…

The financial crisis has led to burgeoning levels of non-performing loans and other impaired claims at European banks. As traditional workout mechanisms have all too often proved to be ineffective in materially reducing bad claims, particularly during a systemic crisis, policy-makers have resorted to asset separation and guarantee schemes. Where established, AMCs have relieved banks of problematic claims in exchange for state-guaranteed bonds and other assurances. The exchange of assets for such bonds has typically provided some capital relief by reducing risk weights. Prominent country cases include the National Assets Management Agency (NAMA) in Ireland, the Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria (SAREB) in Spain, and the Bank Asset Management Company (BAMC) in Slovenia, established in 2009, 2012 and 2013 respectively. Other forms of asset support have also been implemented, including tailored schemes for individual banks, such as the Swiss National Bank's stabilisation fund, special purpose vehicles in Germany and the United Kingdom's Asset Protection Agency.

… although challenges and trade-offs have emerged

While it remains too early to discuss the long-term merits of these schemes, not least given their relatively long expected lifespans, some central challenges and trade-offs have emerged, notably concerning which institutions and assets to include as well as the transfer price methodology and which business strategy to adopt.

OBJECTIVES AND MODALITIES OF ASSSET SUPPORT SCHEMES

An overarching objective of official asset support schemes is to minimise the cost to the public of resolving impaired bank claims. By managing the assets until market conditions have improved, a higher sales price may be achieved, thus averting or minimising losses.

Clear objectives are important for the design of support schemes

As with any policy instrument, clear objectives in considering asset separation are critical, not just in terms of the design of any scheme, but also to inform the key principles underlying that design. A number of relatively universal objectives have emerged, although the priority of these objectives may shift depending on the individual circumstances of the target banks, the nature of the support scheme, and the situation of the sovereign sponsoring it. While maintaining financial stability and restoring a healthy flow of credit to the economy is a priority for central banks, containing the impact of asset support measures on public finances and safeguarding a level playing field may also be critical considerations.

Two main approaches exist

There are two main approaches to asset support which differ in terms of the management and ownership of problematic assets, the form of risk-sharing between government and the participating

1 Prepared by Edward O'Brien and Torsten Wezel.

banks, and the time profile of the costs that arise from the scheme. These are: i) asset removal schemes; and ii) asset insurance or asset protection schemes.

Asset removal schemes involve the transfer of assets to an AMC…

Asset removal schemes involve separating the distressed assets of participating banks and moving them to an independent AMC.[2] This transfer allows banks to concentrate on running the healthy parts of their businesses and to possibly access funding on more favourable terms, while the distressed assets are managed by independent specialists. At the same time, participating banks typically record losses stemming from a transfer of assets at below book value. From a financial stability perspective, an asset removal scheme may be preferable where there is a high probability of a continued impairment of asset values.

… while asset insurance schemes protect against tail risks

In turn, asset insurance or protection schemes, such as the one set up in the United Kingdom, aim to isolate distressed, typically illiquid assets on a bank's balance sheet. They effectively establish a lower limit for valuation losses by invoking a government insurance scheme until market conditions and asset values recover. Although the assets remain formally on the bank's balance sheet, in practice the assets are typically ring-fenced in an internal workout unit and managed separately from the rest of the bank's assets. The main benefit of asset insurance schemes is that, despite the large contingent government liability, the scheme requires no initial public spending, nor do the banks have to report materialised losses as the assets are not sold.

This special feature focuses on asset removal schemes, and in particular on issues related to AMCs that are established to deal with the impaired assets of multiple banks.[3]

When may an asset removal scheme be necessary or desirable?

AMCs have clear merits under certain conditions…

Before considering the specificities of asset removal schemes, it is worth exploring the key triggers that motivate the establishment of such a scheme. Setting up an AMC to receive bank claims generally represents a market intervention. At first sight, it appears less invasive to follow the strategy of placing impaired assets in an internal restructuring unit in conjunction with appropriate recapitalisation. However, under certain conditions a centralised AMC may be beneficial. These are outlined below.

Depressed market prices and collateral values: Asset support delivers relief through the value of time. A forced workout of problem assets, including property held as collateral, may further drive down market prices and set off a race to the bottom. Typically with an AMC, a long time span is envisaged for asset disposal, to be undertaken in a measured fashion and in line with normalisation of market conditions. NAMA and SAREB, for example, operate under the expectation of 10 and 15 year time spans respectively.

Loss of market access: A large portfolio of non-paying illiquid claims implies reduced cash flows that may lead to funding problems, particularly in the wholesale market. The transfer of assets to an AMC may provide banks with liquid, and possibly Eurosystem eligible, collateral. As sovereign-backed bonds, their holding typically has no capital charge and a relatively low funding cost.

2 There are a number of variants of such schemes. For example, an AMC may be established to warehouse the assets of just one participating bank or it may act as an aggregator, receiving assets from a number of banks.

3 Issues concerning special purpose vehicles or other spin-off entities tailored to address individual problem institutions are beyond the scope of this article.

Lack of capacity: Beneficiary banks may lack the resources to work out large quantities of impaired assets, whereas an AMC could attract the needed skills and be more productive in the management and workout of assets.

Low economies of scale: An orchestrated approach through the establishment of a single AMC may combine larger quantities of similar assets and is likely to lead to a better resolution of problem assets at lower cost.

Weak credit origination: The transfer of impaired assets to an AMC allows banks to better use their resources and refocus on lending activities rather than working out high stocks of non-performing loans. It also may faciliate the disposal of non-core assets that may be mandated by compulsory restructuring efforts, as a result of a state aid ruling.

Adverse incentives: If the workout process is protracted owing to the leniency of banks towards their borrowers to protect business relationships, an AMC can help speed up the process as it can act more decisively in the public interest.

… although recent research, while confirming these merits, also points to pitfalls

Recent research tends to corroborate the potential benefits of an AMC, notably better access to funding and the expansion of lending following the capital relief provided, but also points to some challenges. In theory, for a bank to participate voluntarily in an asset removal scheme, the transfer value must more than compensate for opportunity and "stigma" costs. Specifically, the AMC option may entice the distressed bank to offload legacy assets only if the amount of safe assets received in return exceeds the value of the return on the bad assets under adverse conditions. Should the AMC lack the expertise to extract the full value of the transferred assets, however, a lump-sum subsidy in the form of a capital injection may have the same effect at lower cost.[4] This course of action may create an element of moral hazard, however: were banks to foresee that a high stock of bad assets could eventually be offloaded to an AMC, they may become more risk-prone in the run-up to a crisis.[5] In practice, however, the recently created AMCs have typically overcome these concerns by mandating involuntary participation and transferring assets at steep discounts.

GUIDING PRINCIPLES FOR ASSET SUPPORT SCHEMES

ECB published principles for such schemes in 2009…

In considering the establishment of an asset removal scheme or an asset support scheme, a number of broad and generalised guiding principles of importance to policy-makers have emerged. In 2009 the ECB published a set of guiding principles for asset support schemes.[6] The most relevant in the context of this discussion include those outlined below.

Institutions: The scope of institutions eligible to participate in a scheme is important. In the light of the objective of maintaining a level playing field, a scheme, which may be voluntary in nature, should as a principle remain open to all institutions with a large share of eligible assets. However, from a public finance perspective, carefully chosen criteria may be applied to limit participation to certain institutions such as those with large concentrations of impaired assets or with systemic relevance. The criterion for institutional eligibility in NAMA was guided by exposure to eligible

4 See A. Hauck, U. Neyer and T. Vieten, "Reestablishing stability and avoiding a credit crunch: comparing different bad bank schemes", *Düsseldorf Institute for Competition Economics Discussion Papers*, No 31, 2011 and D. Dietrich and A. Hauck, "Government interventions in banking crises: effects of alternative schemes on bank lending and risk taking", *Scottish Journal of Political Economy*, Vol. 59, No 2, 2012.

5 See C. Ilgmann and U. van Suntum, "Bad banks: a proposal based on German financial history", *European Journal of Law and Economics*, March 2011.

6 ECB, "Guiding principles for bank asset support schemes", February 2009.

assets, whereas for SAREB, the criterion for inclusion was the receipt of state aid. In both cases, participation was mandatory, subject to these criteria.

Assets: Given the differences in individual institutions' balance sheets, business models and financial conditions, a pragmatic case-by-case approach to selecting eligible assets is preferable. In each case, a decision should be made on the type of asset to be transferred and whether performing loans are also eligible, meaning that entire loan segments can be transferred. For both SAREB and NAMA, a relatively narrow scope of assets was identified and focused in large part on credits to the development and commercial real estate sectors.

Valuation: The valuation of eligible assets is a complex issue that is crucial for the ultimate success of any asset support scheme. Third-party expert valuations, preferably based on micro-level inputs and taking into account the asset types, should be used to arrive at reasonable haircuts and so yield the best estimate of the long-run value of the assets as well as the cost of the support measures. In practice, banks participating in AMCs in recent years have been subject to the European competition authority's rulings on state aid. These rulings have influenced the transfer price methodology, which is based on the concept of real economic value.

Risk-sharing: An adequate degree of risk-sharing is a necessary element of any asset support scheme so as to limit the cost to the public, provide the right incentives, minimise the risk of moral hazard and maintain a level playing field across institutions. This is particularly evident in the capital structure of a scheme. The extent and features of risk-sharing may be best decided on a case-by-case basis, although past experience may provide useful guidance.[7]

Governance: Commercial business criteria should be a key factor underlying the governance of asset support schemes, regardless of whether the scheme has resulted from outright bank nationalisation or not. Schemes that envisage well-defined exit strategies should be favoured, notwithstanding the fact that some schemes may have a long lifespan. These considerations may, for example, influence the design, especially in the case of asset removal schemes.

Conditionality: A key aim of asset support is to assist banks in restoring an adequate flow of lending with the support of private sector equity capital. Asset support measures may, therefore, be conditioned on commitments to continue meeting credit demand according to commercial criteria. Such conditionality might be needed because the self-interest of the privately-owned banks could otherwise lead them to focus on preserving and rebuilding their own equity.[8]

Duration: Finally, the duration of any scheme should be sufficiently long, taking into account the nature and maturity structure of the eligible assets. A sufficiently long duration tends to guard against losses otherwise incurred in the premature sale of acquired assets. Duration considerations may also affect the scope of eligible assets, particularly where the maturity profile of potential asset classes is significantly greater than the preferred duration of the AMC.

… and recently established AMCs are broadly in line with these principles

Since the guidelines were first published, a number of asset removal schemes have, as mentioned, been established in the euro area, allowing for a comparison with these guidelines and for a reflection on how these issues can be addressed in a practical manner. Ireland and Spain are two

7 In the Irish case, any residual losses incurred by NAMA at liquidation may be recovered through a special surcharge on participating banks, while the rewards to NAMA equity holders are capped.

8 On the other hand, research has shown that such conditionality may lead to overinvestment in risky assets under certain conditions and so lead to adverse outcomes (see Dietrich and Hauck, 2012).

countries in which an AMC has been established to deal with exposures relating to real estate. Overall, the frameworks chosen for these AMCs can be seen to be broadly in line with the guiding principles.

INSTITUTIONAL FRAMEWORK AND OPERATIONAL ISSUES

Devising an institutional framework for AMCs is important…

Policy-makers face a number of decisions when devising the institutional framework for an AMC, but they also have to address a number of operational challenges to ensure its proper functioning. The salient institutional issues may include the legal personality of the AMC, along with modalities for ownership, governance and capital structure, as well as the envisaged size of the AMC, the appropriate extent of bank participation and the eligibility of assets for transfer. Operational issues comprise the calculation of appropriate transfer prices in view of the characteristics of the assets and EU state aid rules, the management and disposal of acquired assets, and services provided by the AMC.

… and includes a number of decisions pertaining to…

The institutional framework typically establishes whether there should be a single AMC for the entire banking sector or multiple entities linked to beneficiary banks (special purpose vehicles). A single AMC is preferable if the transferred assets are fairly homogeneous – such as loans to a certain sector – or if a number of similarly affected banks will need to participate in the scheme. Conversely, bank-specific vehicles may be tailored to the characteristics of the beneficiary bank, including its impaired assets. The framework also determines the AMC's legal form as well as its ownership and capital structure. AMCs have been established as corporate entities that are either fully state-owned or have a majority participation of private investors. Moreover, an AMC may also be able to provide interim financing against strict criteria.[9] Other modalities covered by the framework may include governance of the AMC, the range of services envisaged, as well as modalities for its termination and possible burden-sharing.[10]

… the size of an AMC…

The ultimate size of any asset removal scheme may need to be limited for a number of reasons. From a **fiscal perspective**, if the resultant AMC were to be state-controlled, the capacity of the state to absorb the increase in debt would have to be assessed, along with the need to provide adequate capital for the vehicle to operate. Furthermore, capital shortfalls that may arise in beneficiary banks as a result of transferring assets to the AMC at real economic value (i.e., below book value) may require the state to recapitalise the banks, putting further stress on the fiscal outlook. Naturally, the larger the AMC, the greater the potential for large capital shortfalls to emerge. A privately-owned AMC may be classified outside the government sector, and therefore not result in an increase in government debt, provided a number of conditions are met.[11] However, a number of challenges arise in achieving such a status, stemming from the size of the entity. The vehicle will have to

9 Theoretically, an AMC could be given a banking license to facilitate the provision of credit to third parties. However, this would likely subject the AMC to bank regulation and supervision as well as stricter disclosure requirements, which may obstruct the discharge of its responsibilities. Granting an AMC a banking license may risk corrupting its primary function and may have an adverse impact on the design parameters of the entity, as forbearance could be a means by which the AMC could mask losses. Furthermore, a state-controlled bank established in times of financial sector stress may not be well-disciplined and sufficiently commercially oriented. None of the three recently created AMCs have obtained a banking license.

10 The design of an AMC may include "claw-back" provisions so that losses incurred by the AMC may be recouped from the participating banks in the future. With ill-conceived claw-back provisions, there may be less effort to perfect valuations on transfer and to maximise the value of the assets.

11 According to the rules by which Eurostat compiles government deficit and debt statistics, an AMC which is majority privately-owned may be classified as outside the government sector, even if its liabilities have received a government guarantee, provided that it is established for a temporary duration, has the sole purpose of addressing the financial crisis and its expected losses are small in comparison with the total size of its liabilities. See also Eurostat guidance on such structures in Section IV.5 of the Manual on Government Deficit and Debt, available at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-13-001/EN/KS-RA-13-001-EN.pdf. Both NAMA and SAREB are classified as being outside the government sector.

be adequately capitalised in order to satisfy statistical authorities that any losses incurred by the AMC will not ultimately have to be borne by the state. Furthermore, the requirement of majority private ownership effectively limits the likely size of any such vehicle, as the potential for raising private capital may be limited. Finally, while it may be desirable for an AMC to be classified as being outside the government sector, insofar as its liabilities are guaranteed, the AMC remains a contingent liability of the state and adverse developments may have an impact on its status. This again raises the discussion on size, as a very large entity relative to the state may pose risks, perceived or otherwise.

From the **perspective of an AMC**, there are also a number of reasons to consider limiting size. Primarily, the greater the amount of assets to be managed by the AMC, the more challenging the operational task. Of course, an appropriate organisational structure may mitigate such concerns, including the establishment of more than one AMC. However, market distortion concerns may also arise if an AMC were to absorb large proportions of assets from a given system. From the central bank perspective, a very large AMC may also be undesireable.

… the capital structure…

The capital structure adopted by an AMC is subject to the ownership structure. Typically, the main portion of AMC liabilities are government-guaranteed senior bonds. The eligibility of such bonds for Eurosystem credit operations by participating banks has been a crucial aspect of the success of these schemes. As mentioned previously, if the AMC is to be classifed as a financial corporation, rather than within the government, then sufficient private capital must be raised from private participants to assure majority private ownership and adequate loss-absorbing capacity before government guarantees are called. Private capital may be in the form of equity and subordinated debt and complemented by the aforementioned government-guaranteed bonds, as in the case of NAMA and SAREB. Beyond these general considerations, the financial structure of an AMC may be tailored to specific circumstances, as evidenced by the different approaches taken by NAMA and SAREB. Flexibility may be desirable to ensure that the entities can evolve over time to take advantage of market developments and other changing circumstances.

… and the scope of assets eligible for transfer…

Beyond size, the scope of eligible assets is another key consideration, although it may be difficult to effectively separate decisions on scope from decisions on size. AMCs may have a greater chance of success if they acquire high-value assets and if those assets are relatively homogeneous in nature. For example, in this respect, NAMA primarily acquired large exposures relating to land, development and other commercial property assets. SAREB accepted similar assets, as well as foreclosed residential properties.[12] The inclusion of small, granular assets may be best avoided, given that the intensity of the workout may not be commercially viable. In addition, social sensitivities should not be overlooked either in the choice of eligible assets, suggesting perhaps that residential mortgage loans should not be transferred.

… which may include assets that are still performing but are problematic

Another consideration is the inclusion of performing loans in addition to non-performing loans.[13] For example, both NAMA and SAREB took on performing claims from participating banks. The inclusion of such assets may result from requirements on banks as part of compulsory state aid restructuring plans that aim to terminate non-core activities, typically requiring the transfer of entire asset classes. However, a balance needs to be struck to ensure that such requirements respect the objectives and principles underlying the design of the AMC. Furthermore, certain performing

12 The impact of holding these more granular, lower value assets will be mitigated, however, by the fact that the banks that originated these assets will utilise their own resources (e.g. branch network) to sell the properties, relieving SAREB of that task.

13 This may be particularly troubling for syndicated loans, where the impairment of such loans through transfer to the AMC may result in entire projects becoming impaired and thereby also generating impairments for other banks that may or may not be participating in the AMC.

loans may have a high probability of becoming impaired in the near term and on that basis may warrant inclusion in the scheme, particularly if the transfer of assets to the AMC is envisaged to be a one-off event. In such cases, it would be better to transfer all problematic assets within the envisaged transfer window, whether or not they are considered to be impaired at that point in time. In general, a single asset transfer window may also be preferable in order to bring some degree of certainty to the process and to avoid an ongoing series of transfers and subsequent recapitalisations by participating banks. Furthermore, if there are any doubts surrounding the classification of assets on banks' balance sheets, or if there are concerns that forbearance has been used by banks to avoid recognising impairments, it may also be wise to transfer exposures to problematic sectors to the AMC, as they may later be shown to be impaired after the transfer window has closed. On the other hand, the transfer of performing claims may be seen as detrimental in that it reduces participating banks' cash flows and revenue and severs long-term business relationships. Moreover, performing loans transferred to the AMC, particularly commercial loans with bullet repayments, may become non-performing solely because the AMC could become unable to extend additional credit. Conversely, it has been argued that a certain share of non-performing loans should be left in the beneficiary banks to safeguard a level playing field with non-participating institutions, although the likely difference in the evolution of non-performing loans across banks also needs to be considered.

Proper pricing of transfers is key for the success of a scheme…

Once the eligible banks and assets are selected, appropriately pricing the asset transfers becomes critical for the entire operation, including for banks and the sovereign. If the transfer price is too high relative to the ultimate sales price, the scheme will be loss-making and the operation will ultimately have resulted in a net transfer to participating banks; too low and those banks will face larger capital shortfalls, the cost of which is most likely to be borne by the taxpayer, although the AMC may then go on to be profitable over its lifetime. EU regulations prescribe a general pricing concept, that of "real economic value" (REV), as AMC operations will necessitate the provision of state aid to beneficiary banks, and competition authorities have a key role in overseeing the implementation of this concept.

… and needs to be in line with real economic value…

Past cases have shown that a conservative approach based on long-term economic value can satisfy these requirements. REV is the transfer value that reflects the underlying long-term economic value of an asset on the basis of observable market inputs and realistic and prudent assumptions about future cash flows.[14] Using REV rather than market or fair value is deemed to adequately counterbalance temporary market exaggerations fuelled by crisis conditions. REV can be estimated as the sum of the discounted expected cash flows until the maturity of the asset, which corresponds to the payment stream's net present value.[15] Notwithstanding this definition, REV is notoriously difficult to calculate as several parameters such as expected loss – derived from applying the probability of default, the loss given default and a discount factor to projected cash flows – need to be calibrated. Using historical values may no longer be valid in the presence of structural change. The uncertainty surrounding REV has led policy-makers to apply conservative haircuts to asset values and occasionally burden-sharing mechanisms for retroactively adjusting the transfer value or recouping eventual losses. In cases where AMC bonds are exchanged for the transferred assets, another important factor in determining total transfer value is the coupon rate on those bonds.

14 See European Commission, "Communication from the Commission on the Treatment of Impaired Assets in the Community Banking Sector", 2009.

15 For more details, see Y. Boudghene and S. Maes, "Relieving Banks from Toxic or Impaired Assets: The EU State Aid Policy Framework", *Journal of European Competition Law & Practice*, October 2012.

… which likely leads to conservative valuations

In terms of the structure of an AMC, achieving a classification of being outside the government sector may require that a suitably conservative REV approach be taken to ensure that the expected losses arising in the vehicle will be relatively small. In practical terms, a number of options have been pursued in this regard. NAMA relied on tranche-by-tranche due dilligence of the loan assets. SAREB, on the other hand, applied a contemporary stress-testing exercise, subject to some methodological adjustments. In this case, however, a follow-up due dilligence exercise is also part of the process.[16]

Other operational elements are critical as well

A number of other critical elements affect the design and implementation of an AMC. State aid considerations may spill over into participation incentives. A bank which may not need state aid, but still wishes to participate in a centralised AMC may be dissuaded from doing so. Partipication will require a state aid ruling and a subsequent restructuring plan being agreed with competition authorities. In order to maintain a level playing field, the financial stability dimension needs to be borne in mind, giving some weight to the argument for making participation in any such scheme mandatory, so as to ensure that certain asset classes are cleanly removed from the system as a whole, or at least from a significant subset of that system. Lastly, from a practical perspective, a number of operational issues may typically arise, against which appropriate measures can be taken.

Level playing field: In the case of a partially privately-owned AMC, there is a resource transfer from a less affected part of the sector to a participating bank, which may benefit the owners of the bank as well as its bondholders. Presuming an appropriate transfer value, this benefit consists in capital relief through the reduction of risk-weighted assets and the provision of liquid bonds that possibly have a relatively high risk-adjusted yield. Both of these compromise the level playing field. Corrective arrangements to counterbalance this subsidy may include profit-sharing with or direct compensation of non-beneficiary banks as well as bailing in junior bondholders of the participating banks. In some cases, the large haircuts imposed on transferred assets may also be motivated by the desire to attain an adequate return on equity for the private shareholders of the AMC.

Asset management and disposal: The framework also lays out the AMC's strategy for managing and eventually disposing of the acquired assets. In this, the AMC needs to strike a balance between the preference for quick disposals and avoiding losses. More specifically, it faces the trade-off between selling the assets quickly with a higher likelihood of a loss-making sales price and binding resources while waiting for market conditions to further normalise. If the lifespan of the AMC is relatively short, a wait-and-see strategy may lead to a high degree of state ownership in private corporations.

Liquidity management and debt redemption: To ensure that an AMC's overarching goal – the timely wind down of its portfolio – is achieved and not diverted, strict guidelines should be laid down to ensure that an AMC reduces its outstanding liabilities at every reasonable opportunity, bearing in mind the natural priority of the capital structure, and does not run up large cash buffers.

Vendor financing: To faciliate the efficient wind-down of the entity, agreements should be put in place to ensure that vendor financing is available to potential buyers of AMC assets, at market conditions. Without such financing, and in the context of what may be tight credit conditions, an AMC may have difficulties selling assets. In addition, it may be beneficial, albeit under strict criteria, for an AMC to provide interim financing, for example, to real estate developers so that ongoing projects may be finished in a timely manner.

16 Stress tests alone cannot be sufficient to value assets for transfer to an AMC, as only asset-by-asset due diligence can ensure the quality of information and, for example, ensure legal title to collateral.

External servicing: A number of reasons may make it impractical for the AMC to consider managing all of its assets, namely the sheer number of assets, the resources required to carry out such tasks or a lack of specific knowledge of the assets. Each of these can be overcome by agreements with the participating banks so that they continue servicing the assets they have transferred to the AMC in return for appropriate fees. Alternatively, servicing through third-party providers may be considered. To be successful, these agreements must be appropriately prescriptive, have quantifiable benchmarks in terms of performance and take into account the incentives of the stakeholders.

CONCLUDING REMARKS

This special feature has described some of the fundamental characteristics of asset removal schemes, within the broader field of asset support measures, from a financial stability perspective. A review of objectives and modalities for asset removal, particularly through the use of AMCs, suggests that several metrics are important in the design of such schemes. Decisive factors in designing an effective AMC include size, scope, governance and participation incentives. Practical experiences to date suggest that such schemes can be very helpful in strengthening the banking sector; indeed, recent initiatives have illustrated how a comprehensive banking sector clean-up in the case of legacy issues can be an effective means of fostering a more efficient and resilient banking sector.