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The next chapter
Creating an understanding of Special Purpose Vehicles

December 2011

Risk Management:

SPVs and related products continue to play a vital role in financial markets. We have highlighted some of the key issues and benefits of using these vehicles in lieu of latest regulatory factors and changing market dynamics.

The paper also provides an imperative to how financial institutions should approach SPVs going forward. A balanced approach to risk and clarity for investors appears to be the way forward.

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The future of Special Purpose Vehicles (SPVs) depends on the ability to offer clarity to investors and constantly balance risk

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Executive summary

Special Purpose Vehicles (SPVs) and Special Purpose Entities (SPEs) have been household words within financial circles for decades. Lately, these entities have assumed centre stage in the wake of the financial crisis and its continuing after-effects. Although these vehicles have been under increased scrutiny, thanks to Enron and Lehman Brothers, they are not all bad and when effectively managed, can be highly beneficial.

These vehicles played a vital role in the efficient operation of global financial markets. They allowed large corporations to meet specific objectives by way of obtaining finances, transferring risk and performing specific investment activities.

In the past 30 years, SPVs have been used extensively as a means of securitisation for property-based financial products. This was further facilitated by easy credit conditions and financial deregulation. A period of growth in the world economy followed, driven by the use of these vehicles and related conditions. These added to the housing and credit bubble that would soon give way.

The onset of the economic crisis in 2007 stressed the robustness of these vehicles and revealed a number of inherent defects in them. The flexibility of these vehicles meant that they were vulnerable to misuse with potentially devastating consequences. This has been proven time and time again with mammoth corporations like Enron and Lehman Brothers being decimated due to inappropriate usage of these entities.

SPVs have a number of key utilitarian features and benefits that allow investors access to investment opportunities which would otherwise not exist. These include facilitating and supporting securitisation, financing, risk sharing and raising capital to name a few. In the absence of SPVs, these objectives would not be possible without putting the entire corporation at risk. It also provides significant benefits to the parent firm by allowing ease of asset transfer, reducing 'red tape', providing tax benefits and legal protection.

Some of the key risks SPVs pose to the sponsoring firm are lack of transparency, reputational risk, liquidity and funding risk and equity risk. Lessons learnt from these collapses and their knock-on effects have led regulators to take strong measures that subject these vehicles to even more scrutiny than before. Stronger governance, increased oversight and more transparent reporting are some of the measures that form part of a tighter regulatory framework governing SPVs. A key example of this is the BASEL III regulation forcing banks to maintain adequate levels of capital and liquidity.

The alternative to managing the risks behind SPVs is to stop using these vehicles by reintermediation of off-balance sheet assets back onto the balance sheet of the sponsoring banks. Do the benefits of SPVs justify the risks involved? A broad range of views exist on this question with the middle ground being preferred by most.

So what is the solution? It is vital for all financial institutions with exposure to SPVs to think about what the solution is and how they should approach it. Do they increase or reduce the use of SPVs? Should they consolidate SPVs with their sponsors? It is important for companies to have a clear assessment of 'internal factors' and 'external factors' and their implications on SPVs. 'Internal factors' such as current structure and implications on investment should be assessed in the wake of 'external influences' like competition and regulation. The future of SPVs depends on the ability to offer clarity to investors and constantly balance risk.

Market background

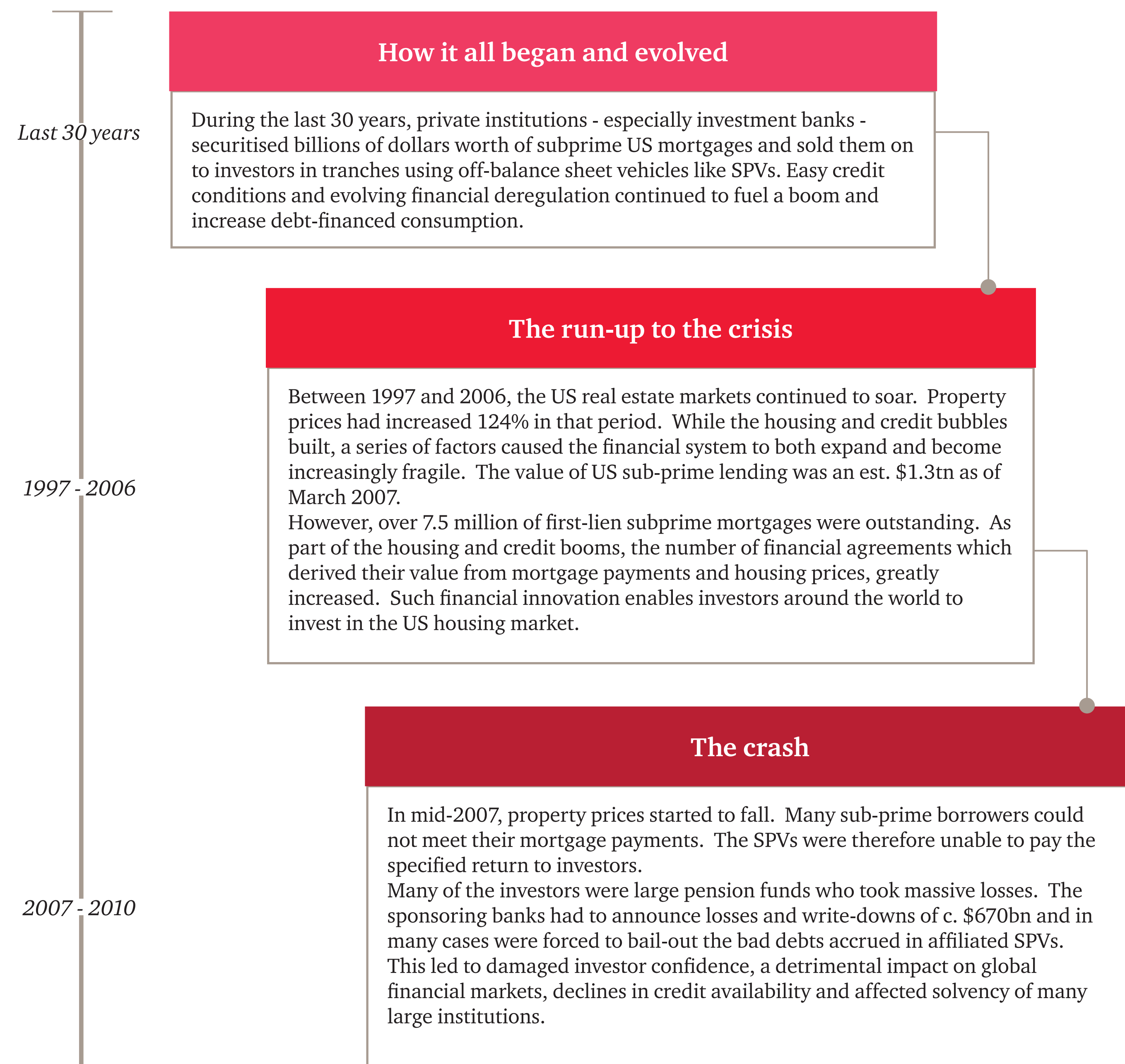
The financial crisis has prompted a major review of the operation of the financial markets. The causes of dislodgement are complex and widespread, but include macroeconomic factors, financial market factors as well as the results of risk disintermediation intensified by the usage of SPVs.

The volume and complexity of SPV structures increased significantly over the years through to 2007 in conjunction with the growth of markets for securitisation and structured finance products. US & European structured credit product issuance increased c. 60 fold from $50bn in 2000 to c. $3,000bn just before the financial crisis erupted in 2008. The period also witnessed a rapid growth in the unregulated financial industry – resulting from the use of SPVs in raising money for lending and investing, rather than through the use of bank's balance sheets. Asset backed commercial paper in US & Europe increased from c. $200bn to c. $800bn in 2008.

SPVs contribute to the efficient operation of the global financial markets by providing finance opportunities for a wide range of securities to meet investor demand. Where parties to an SPV develop a comprehensive understanding of the structural behaviours and risks associated of these entities under various scenarios, they can effectively benefit from SPVs.

However, the current market crisis that began in 2007 stressed a number of these structures to destruction. Serious deficiencies in the risk management of these SPVs were identified. Although recent market events have identified a reduction in issuance of securities using SPVs, there is an expectation that SPVs will continue to be used for financial intermediation and disintermediation going forward. With correct guidelines and good management, SPVs can be an extremely beneficial tool for both banks and investors alike and therefore it is useful to look at ways in which the risks associated with SPVs can be effectively managed.

How SPVs contributed to the 2007 subprime mortgage crisis



For a view of major financial disasters and their underlying circumstances, refer to section 'Key SPV related failures' (see page 10)

Features and uses of SPVs

A Special Purpose Vehicle (SPV) sometimes referred to as a Special Purpose Entity (SPE) is an off-balance sheet vehicle (OBSV) comprised of a legal entity created by the sponsor or originator, typically a major investment bank or insurance company, to fulfil a temporary objective of the sponsoring firm. SPVs can be viewed as a method of disaggregating the risks of an underlying pool of exposures held by the SPV and reallocating them to investors willing to take on those risks. This allows investors access to investment opportunities which would not otherwise exist, and provides a new source of revenue generation for the sponsoring firm.

Some common uses of SPVs are as follows:

- **Securitisation –** SPVs are the key characteristic of a securitisation and are commonly used to securitize loans and other receivables. This was the case recently with the US subprime housing market whereby banks converted pools of risky mortgages into marketable securities and sold them to investors through the use of SPVs. The SPV finances the purchase of the assets by issuing bonds secured by the underlying mortgages.
- **Asset transfer –** Many assets are either non-transferable or difficult to transfer. By having a SPV own a single asset, the SPV can be sold as a self-contained package, rather than attempting to split the asset or assign numerous permits to various parties.
- **Financing –** A SPV can be used to finance a new venture without increasing the debt burden of the sponsoring firm and without diluting existing shareholders. The sponsor may contribute some of the equity with outside investors providing the remainder. This allows investors to invest in specific projects or ventures without investing in the parent company directly. Such structures are frequently used to finance large infrastructure projects.
- **Risk sharing –** SPVs can be used to relocate the risk of a venture from the parent company to a separate orphan company (the SPV) and in particular to isolate the financial risk in the event of bankruptcy or a default. This relies of the principle of 'bankruptcy remoteness' whereby the SPV operates as a distinct legal entity with no connection to the sponsor firm. This has been challenged recently, post financial crisis with several court rulings that SPV assets and funds should be consolidated with the originating firm.
- **Financial engineering –** The SPV structure can be abused to achieve off-balance-sheet accounting treatment in order to manipulate more desirable financial and capital ratios or to manage regulatory requirements (for example to meet Basel II Tier 1 capital ratio requirement) or as a method for CFOs to hide losses and debts of the firm (as was the case with Enron, see page 10)
- **Raising capital –** Such vehicles can be used by financial institutions to raise additional capital at more favourable borrowing rates. Since the underlying assets are owned by the SPV, credit quality is based on the collateral and not on the credit quality of the sponsoring corporation. This is an advantage for non-investment grade companies which can achieve lower funding costs by isolating the assets in a SPV.

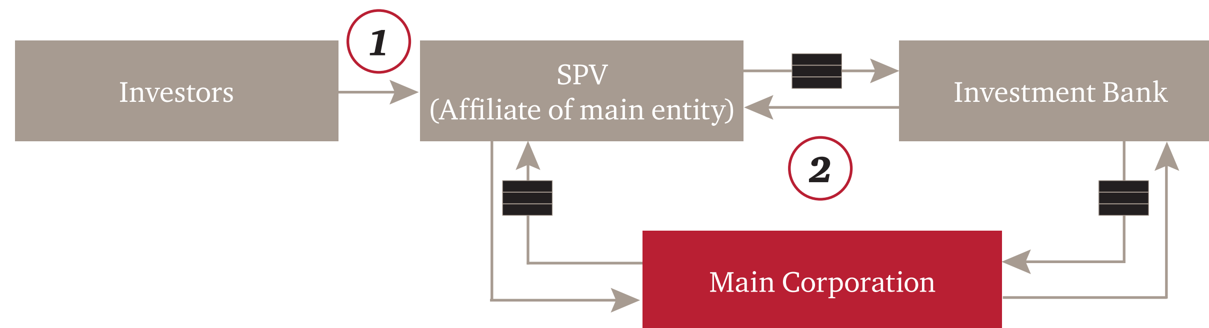
SPV structure

An SPV may be structured in different ways, depending on what the originator is trying to achieve through the vehicle and depending on where it is originated geographically.

The following diagram shows examples of how SPV structures may vary in different countries.

Other common legal forms used in other jurisdictions include a corporation, partnership, trust, Stitching (i.e. a foundation under Dutch law), unincorporated entity, or a multi-user structure such as protected cell company

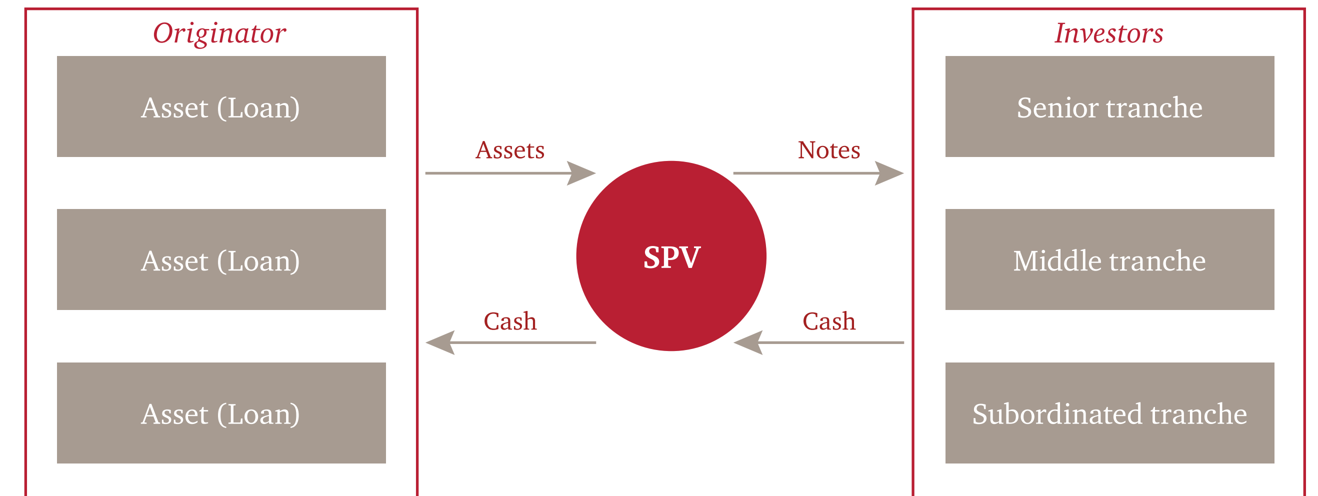
The following diagram shows the typical structure of a SPV used to obtain financing.



Source: Investopedia

- The Main Corporation creates a SPV (its affiliate) in order to sell assets on its balance sheet to the SPV and obtaining financing through the SPV.
- The SPV obtains funds to purchase the asset by way of debt financing from independent equity investors.
- The SPV starts a circular transaction by transferring the money raised first to the main corporation and then to the investment bank. The assets flow in the opposite direction from the main corporation to the SPV and then to the investment bank and back to the main corporation, thus effectively cancelling each other out.
- Since the SPV owns the assets, which then become the collateral for the securities issued, lenders evaluate the credit quality of the collateral and not the credit quality of the corporation. As a consequence, lower funding costs are possible. For example, a non-investment grade issuer might be able to obtain funding at investment-grade levels by isolating the assets in the SPV.

The following diagram meanwhile shows how a typical SPV would be structured in a securitisation.



Source: PwC

The underlying assets or loans are purchased by the SPV, then grouped into tranches and sold to meet the credit risk preferences of a wide range of investors.

The SPV legal entity is usually set up as an 'orphan company' with shares settled on charitable trust and with professional directors provided by an administration company in order to maintain independence between the underlying assets and the originator and to ensure that the assets of the SPV do not appear on the balance sheet of the originator.

Key benefits to sponsoring firms

Asset Ownership – An SPV allows the ownership of a single asset often by multiple parties and allows for ease of transfer between parties.

Minimal red tape – Depending on the choice of jurisdiction, it is relatively cheap and easy to set up an SPV. The process may take as little as 24 hours, often with no governmental authorisation required.

Clarity of documentation – It is easy to limit certain activities or to prohibit unauthorised transactions within the SPV documentation.

Freedom of jurisdiction – The firm originating the SPV is free to incorporate the vehicle in the most attractive jurisdiction from a regulatory perspective whilst continuing to operate from outside this jurisdiction.

Tax benefits – There are definite tax benefits of SPVs where assets are exempt from certain direct taxes. For example, in the Cayman Islands, incorporated SPVs benefit from a complete tax holiday for the first 20 years.

Legal protection – By structuring the SPV appropriately, the sponsor may limit legal liability in the event that the underlying project fails.

Isolation of Financial Risk– By structuring the SPV as an 'orphan company', the SPV assets may not be consolidated with the firm's on-balance sheet assets and are 'bankruptcy remote' in the event of bankruptcy or a default.

Meeting regulatory requirements – By transferring assets off-balance sheet to an SPV, banks are able to meet regulatory requirements by freeing up their balance sheets..

Source: PwC

Key risks to sponsoring firms

While SPVs clearly perform an important role in the functioning of the financial system, they also entail considerable risks for the SPV sponsoring firm.

Lack of transparency

- The complexity of SPVs - often in the form of layers upon layers of securitised assets - can make it near impossible to monitor and track the level of risk involved and who it lies with.

Reputational risk

- The firm's own perceived credit quality may be blemished by the underperformance or default of an affiliated or sponsored SPV. For this reason it is not a credible risk that the firm will abandon the SPV in times of difficulty.

Signalling effect

- The poor performance of collateral in an SPV attracts a high degree of attention and assumptions are made that the quality of the firm's own balance sheet can be judged on a similar basis.

Franchise risk

- There is a risk that investors in an affiliated SPV are upset and this affects other relationships between the sponsor and these investors, for instance as holders of unsecured debt.

Liquidity and funding risk

- The poor performance of an affiliated SPV may affect the firm's access to the capital markets.

Equity risk

- The firm might hold a large equity tranche in a vehicle (e.g. an SIV). If the firm does not step in and support or save the vehicle from collapse in difficult situations, the resulting wind-down of the SPV and sale of the assets at depressed valuations is likely to erode the firm's equity in the SPV, to a greater extent than the firm stepping in and either affecting an orderly wind-down of the vehicle or bringing its assets back onto its balance sheet.

Mark-to-market risk

- The forced sale of assets from an affiliated SPV could depress the value of related assets that the firm holds on the balance sheet. The firm will want to prevent a large negative mark-to-market impact on its own balance sheet.

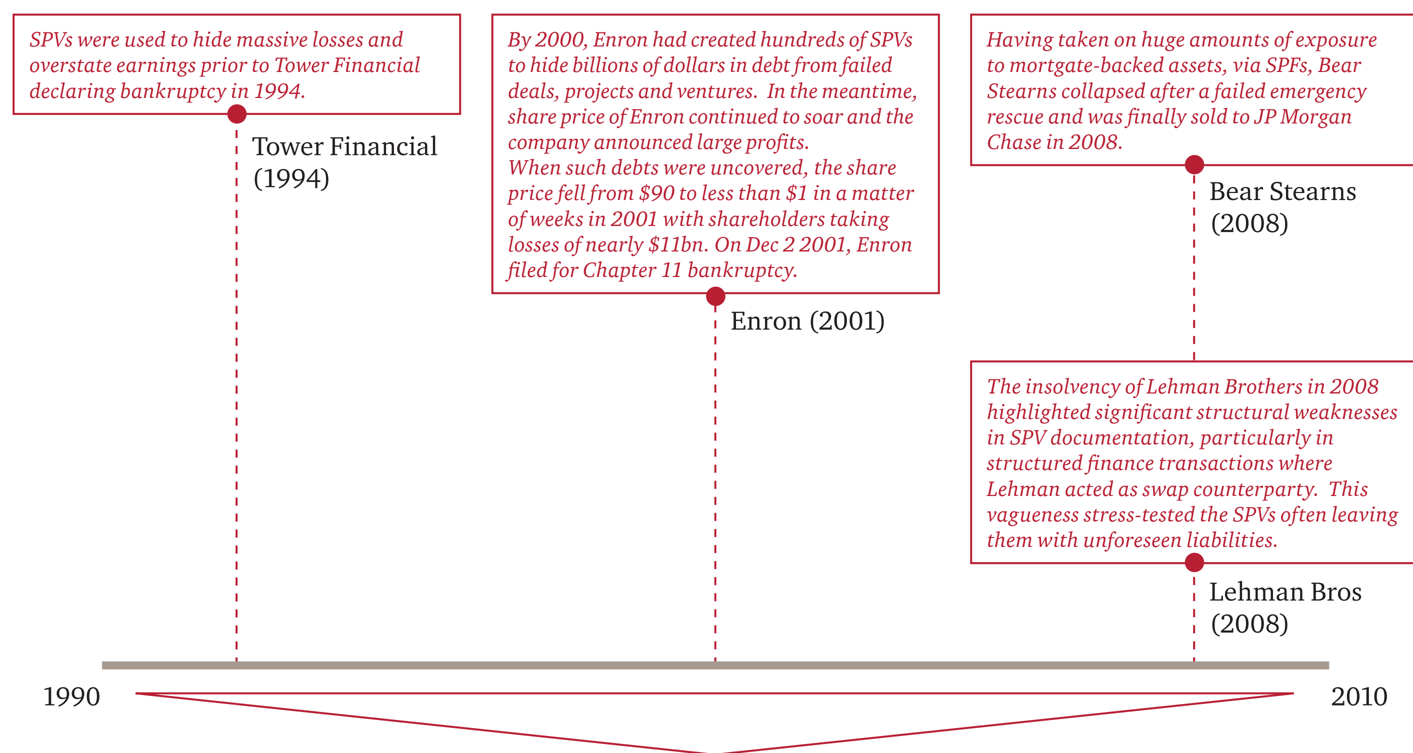
Regulation

- The same regulatory standards do not apply to assets contained within an SPV as to the firm's assets on balance sheet. This is a reason that many firms opt for these vehicles in the first place. However, this lax regulation poses an indirect risk to the originating firm.

Source: PwC

Key SPV related failures

Poor risk management and a misunderstanding of the risks of SPV usage has been a factor in a number of high profile failures. Some of these are outlined on the timeline diagram below.



Given the high incidence of failures in the last two decades, it is very likely this could happen again.

Recent regulatory changes

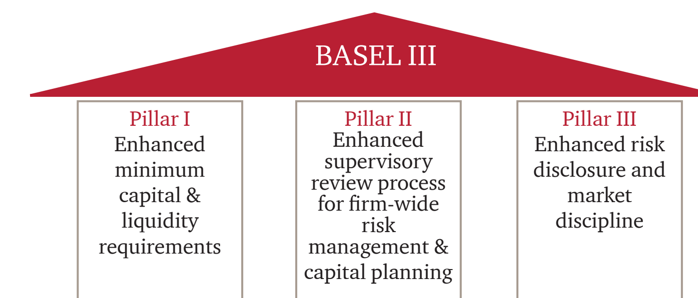
The rules around whether the SPV should be consolidated and appear on or off-balance sheet depends on which accounting standards are used. The following table highlights some of the differences in approach.

	International Financial Reporting Standards (IFRS)	US Generally Accepted Accounting Principles (GAAP)
SPVs on or off-balance sheet?	IFRS requirements demand that an SPV's assets are consolidated if the vehicle is 'controlled' by the main entity. In this case the SPVs assets and associated funding are shown as assets and liabilities respectively. SIC 12 gives the following four tests as indicators to determine whether the originator is in 'control': 1. It is undertaking activities on its behalf and it benefits from this 2. It effectively controls the SPV 3. It has the majority of the risks of the SPV 4. It receives the majority of the benefits of the SPV	Since January 2010 new rules have been adopted which bring the GAAP standards on SPVs and other OBSVs closer in line with the IFRS. The automatic assumption that SPV assets should appear off-balance sheet no longer applies and relies more on principles around control of the underlying assets in the vehicle.

Since the bankruptcy of Lehman Brothers in 2008, a number of regulatory changes have taken place around SPVs and other OBSVs. In particular there has been:

- A tightening of covenants in lending documentation
- Significant firming up of legal risk management practices both in banks and by regulators
- Increased emphasis on counterparty risk in capital market structures
- An increase in the use of pre-packs and debt-for-equity conversion in restructurings, as well as disputes over valuation models

BASEL III is a new global regulatory standard on bank capital adequacy and liquidity. It was developed in response to the deficiencies identified in financial regulation by the global financial crisis. The capital standards and new capital buffers will require banks to hold more capital and higher quality of capital than under current Basel II rules. The new leverage and liquidity ratios introduce a non-risk based measure to supplement the risk-based minimum capital requirements and measures to ensure that adequate funding is maintained in case of crisis. The intended objectives of Basel III can be defined by three primary pillars:



Source: Moody's Analytics

Managing the risks – regulation and scrutiny

Going forward, there are a number of ways to manage the risks identified around SPVs:

Governance	Reporting capability	Oversight	Motivation
• Firms should ensure the governance process of an SPV is commensurate with the complexity of structure and the degree of active intervention required by the various parties involved	• Firms should have the capability to assess and report on a continual basis their aggregate SPV exposure in conjunction with other firm-wide risks	• Firms should monitor on an on-going basis the quality of transferred exposures in relation to the firms remaining on-balance sheet components • There should be regular oversight and monitoring of the use of SPV activity in order to identify developments that could lead to systematic weakness • Market participants should be able to assess and risk manage factors that increase transaction capability	• The purpose of the SPV should be reconsidered throughout the life of the vehicle in order to distinguish between risk transfer and risk transformation

Regulation	Simplification	Consolidation	External ratings
• Tighten reporting requirements and consolidation of accounts requirements on the use of SPVs • Make external regulators one-product firms whereby they no longer are able to provide consulting services to the same clients whom they provide ratings for	• Simpler structures - an end to layers upon layers of multi-tiered securitisation. • Standarisation of documentation and disclosure requirements of SPVs should be adopted and any material divergence from these standards should be communicated to investors	• If there is evidence that the SPV is receiving financial support from the sponsor firm, then the activities of the SPV should be consolidated with those of the institution for both supervisory and internal risk management purposes • Retention of an equity tranche by the sponsoring firm to ensure the firm has an incentive not to package low quality assets and sell to investors	• Ratings of securitised assets by external rating agencies • This however raises the question of whether the rating agencies are in a position with enough information and experience to make these judgements

Managing the risks – reintermediation

The alternative to managing the risks behind SPVs is to stop using these vehicles altogether through re-intermediation of off-balance sheet assets back onto the balance sheets of the sponsoring banks. The reasoning behind this argument is that the benefits and uses of SPVs do not justify the risks involved and the potential for them to be misused.

Off Balance Sheet Vehicles (OBSVs) have allowed investors to take ownership of risky and illiquid loans, funded in the wholesale markets with a lack of regulatory capital, without necessarily having a full understanding of what they are buying. By creating complex layering and resecuritising, whatever information collected by the loan distributor about the underlying assets is not effectively passed on to the SPV or to the final owner of the assets. OBSVs can therefore be seen as restricting the flow of information.

On top of this, if the SPVs are truly bankruptcy remote, there is a moral hazard for the banks (unless they have committed equity) as they know that they have no financial obligation in the event of bankruptcy or default. They therefore have little incentive to actively investigate and monitor the credit quality of the underlying assets in the loans.

In practise however, it is not a credible threat that the sponsor will leave a SPV to collapse. From a reputational perspective it is not in the sponsor's interests to abandon the SPV affiliated with its name and it will often make more sense to provide the financial support it needs in times of difficulty. Conversely, in this case, there is a moral hazard not for the banks but for the end investors who know that they are financially covered and there is therefore no reason for them to carefully scrutinise the complex structures in which they are investing

It could therefore be argued that, neither party will have an incentive to scrutinise the SPV's activities. This means that SPVs could be inefficient, both from a risk and from a regulatory perspective.

Those who favour this rationale claim that the best possible solution would be to restrict the use of these OBSVs. By bringing SPVs, conduits, SIVs, etc. back onto the balance sheet, they claim that this would increase efficiency in the financial system and re-establish transparency as the sponsor's balance sheet would provide the full picture.

A view of the solution

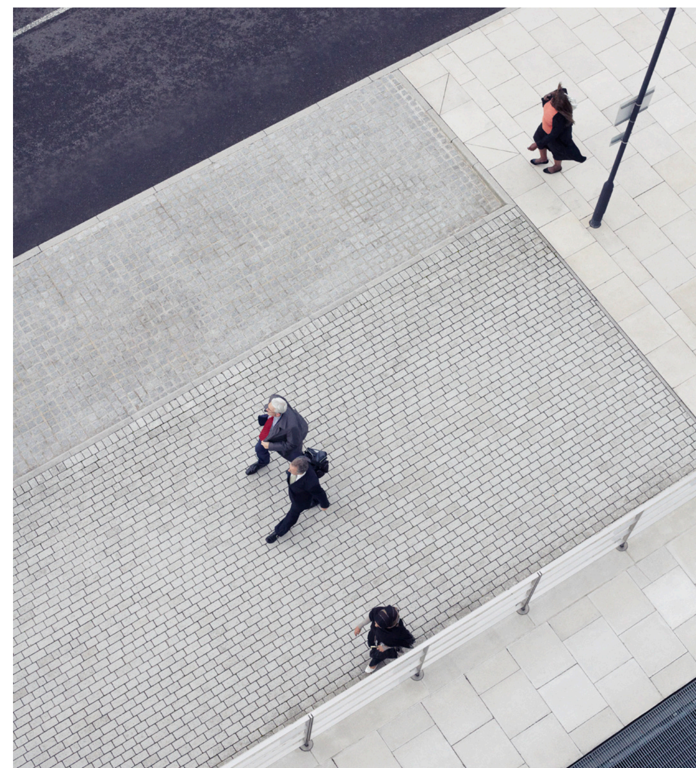
SPVs and other off-balance sheet vehicles have played and continue to play an important role in financial markets both in financing projects and offering investors a greater choice of ventures to invest in (see page 5 on Features and Uses of SPVs). By transferring risk of particular transactions from a parent company and its shareholders to investors who are willing to take on the risk involved, they are an attractive option both to banks and to investors. Off balance sheet companies were created to help finance new ventures. Theoretically, these separate companies were used to transfer the risk of the new venture from the parent to the separate company as a way to finance the new venture without diluting existing shareholders or adding to the parent's debt burden. But the flexibility of these vehicles also means that they can be misused, and this has been the case over the past decade. The case of Enron is an example of how OBSVs allowed debts to be hidden and to manipulate false financial performance. It must, however, be stressed that the usage of SPVs is not inherently problematic, but rather poor risk management can lead to failures.

We are now at a point in time where banks and other financial institutions are looking at their SPV exposure and making decisions about when and how they should use such entities in the future. Do they increase use of SPVs to what it was a few years ago before the financial crisis or should they be wary over their use and actively bring assets in SPVs back onto balance sheet?

The answer depends on who you think should assume the financial risk associated with particular transactions. Consolidation may change the focus of this discussion entirely. Consolidation is the power of a bankruptcy court to consolidate the SPV with the originator. This would mean that the SPV would not be bankruptcy remote; it would remove the moral hazard risk which can be presented by off-balance sheet SPVs but may also reduce the desire to utilise them as a tool.

On the other hand, if SPVs are completely separated from their sponsors, albeit with more intense scrutiny and regulation, the moral hazard from the point of view of the SPV investors would be removed. Investors would know that the sponsor would not come to the rescue of the SPV, and so would manage their investments more efficiently.

It is evident that there is an appetite for using SPVs going forward, but the parameters for their safe use must be correctly established. In order to safely invest in an SPV, investors must understand the structure and implications of their investments, and so some standardisation of documentation and disclosure requirements may be needed. Constant review and monitoring of the risk levels of SPVs in relation to the remainder of the sponsor's portfolio would increase the transparency around SPVs and prevent weaker assets being moved into them for sale to investors. Finally, in the case of a sponsor having to support an SPV, the risks of the SPV should be absorbed into those of the sponsor.



How can we help?

By considering the implications of their SPVs now, banks can avoid paying large fines and compromising the accuracy of the balance sheet. We have helped two Tier 1 Global Investment Banks with their SPV programme. We were able to assist with their regulatory implications with the use and storage of SPVS, and help to make significant cost savings through implementation of the programme.

It is evident that there is an appetite for using SPV's going forward, but the parameters of their safe use must be correctly established. PwC can advise banks on how to manage SPVs, and monitoring and review the risk levels of SPVs in relation to the remainder of the sponsor's portfolio.

SPV's are one of a number of regulatory changes that have far reaching consequences on a bank's strategy and operating model. The unprecedented wave of regulatory change provides an increasingly complex set of considerations. PwC can help a bank to navigate this complexity as part of a wider sustainable strategy. We bring together skills in global operating model transformation, complex program delivery, regulatory advice and technical tax considerations as well as our unique insights gained as administrators of failed banks to help guide your strategy.

Glossary of terms

Term	Definition
Bankruptcy Remoteness	The principle by which the assets contained within the SPV are isolated from the on-balance sheet assets of the originator, provided financial protection in the case of bankruptcy or default
BASEL III	BASEL III is a new global regulatory standard on bank capital adequacy and liquidity
GAAP	Generally Accepted Accounting principles, GAAP or US GAAP refers to the common framework of accounting rules in the US
IAS	International Accounting Standards set standards for business financial reporting and promote the use and application of these standards
IFRS	International Financial Reporting Standards (IFRS) are the principles-based international standards set by the International Accounting Standards Board
Investment grade	A financial product is considered investment grade if its credit rating is higher than a certain threshold (e.g. BBB-) or higher by rating agencies like Moody's or Standard & Poor's
Off Balance Sheet	The business activities of a savings association that generally do not involve booking assets (loans) and taking deposits. Off-balance sheet activities normally generate fees, but produce liabilities or assets that are deferred or contingent and thus, under GAAP, do not appear on the institution's balance sheet unless they become actual assets or liabilities with a value or cost that can be determined
OBSV	Off-Balance Sheet Vehicle. This includes SPVs, SIVs, Conduits, etc. whose assets and liabilities are reported off-balance sheet
Reintermediation	The process of bringing off-balance sheet items in the form of SPVs, Conduits, etc. back onto the firm's balance sheet
Securitisation	Securitization is the financial practice of pooling various types of contractual debt such as residential mortgages, commercial mortgages, auto loans or credit card debt obligations and selling said debt as bonds, pass-through securities, or Collateralized mortgage obligation (CMOs), to various investors.
SIC	The Standards Interpretation Committee's objective is to interpret the application of International Accounting Standards (IAS)
SIV	A structured investment vehicle was an operating finance company established to earn a spread between its assets and liabilities like a traditional bank. They were popular until the market crash in 2008
SPE	A Special Purpose Entity is equivalent to an SPV (see below).
Sponsor	The Sponsor or originator of an SPV refers to the corporation that set it up. The underlying assets may or may not belong to the sponsor
SPV	A Special Purpose Vehicle is a legal entity originated to fulfill a temporary objective of the sponsoring firm
Tranche	In structured finance, a tranche is one of a number of related securities offered as part of the same transaction.

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