



EUROPEAN CENTRAL BANK

EUROSYSTEM

LARGE BANKS AND PRIVATE EQUITY-SPONSORED LEVERAGED BUYOUTS IN THE EU

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EXECUTIVE SUMMARY

Over the last couple of years, activity in the leveraged buyout (LBO) segment of the EU private equity market has increased exponentially with recent transaction volumes reaching levels similar to those seen in the US markets. LBO deal sizes have increased significantly and, at the same time, the leverage involved in these transactions has increased materially. This has raised questions about the risk exposures of the banks which provide the bulk of the debt financing for such undertakings. For this reason, in 2006, the Banking Supervision Committee (BSC) decided to carry out a survey in order to assess the degree of large banks' involvement in the EU's LBO market and to better understand the possible financial stability implications that could originate from such activities.

The survey was conducted by national central banks and supervisory authorities represented in the BSC and covered both quantitative and qualitative aspects of large banks' participation in the financing of LBO transactions in the EU as of mid-2006. Given that a significant number of banks domiciled outside the EU have proven to be important players in the EU leveraged buyout market, information on large non-EU banks' activities that are managed from their EU subsidiaries or branches was also collected.

This report discusses potential sources of risk for banks that could be identified from the survey results, as well as vulnerabilities in the LBO market functioning that could arise from the more general macrofinancial environment. As the scope of the report is focused on banks' involvement in the market, several issues commonly linked with LBOs – such as an assessment of the risks of a LBO market downturn, potential conflicts of interest in banks, the reduced size and depth of public equity markets due to public-to-private transactions – are not covered in the analysis. In addition, no prescriptive recommendations for potential regulatory reactions to LBO-

related risks are spelt out in this report. Any proposals for supervisory action remain the responsibility of the national banking supervisors within their respective jurisdictions.

The results of the survey show that the debt exposures of banks to the EU LBO market are not large relative to their capital buffers. However, intense competition among banks, mostly driven by the potential for lucrative fee revenues from LBO-related activities, has contributed to increased levels of leverage and could have encouraged some market participants to loosen their credit standards, accept weaker loan covenants and simplify their due diligence processes. The survey identified a specific risk for banks, underwriting risk, notably arising from the large LBO debt concentrations which the underwriting banks are exposed to from the day they agree to finance an LBO transaction until its completion, and throughout the debt distribution process. Within this timeframe, banks are vulnerable both to changes in market sentiment that could impair their ability to dispose of debt via the syndicated loan market and to a possible early default of the LBO target firm. The survey revealed that, on many occasions, the timeframes for distributing the debt into the market proved rather lengthy. However, after a successful distribution of their LBO exposures, any direct impact of a market downturn on banks' credit risk would likely prove manageable.

One important caveat to the relatively benign conclusion regarding the risks banks face in this market is the increasingly active segment of the secondary market for LBO debt trading. In particular, the success of the involvement of large banks in the EU LBO market would seem to depend heavily on the efficiency and sturdiness of liquidity in the credit risk transfer markets, on the durability of institutional investors' demand for LBO-related debt, and on the ability of the entities who ultimately bear the risks to weather volatility in the valuation of the assets that are backed by leveraged loans originating from LBO

transactions. Balance-sheets of such entities might not be able to sustain stress beyond the short-term.

Although banks' direct investment exposures to LBO funds were not found to be substantial, the survey established that many banks earn significant income from the investment, fees and commissions derived from LBO-related activities. This suggests that any slowdown in the market could have a negative, albeit most likely limited, impact on these institutions' income streams.

Banks responding to the survey tended to expect that favourable market conditions – driven by abundant liquidity and the benign state of the credit cycle – will continue to drive the expansion of the EU segment of the global LBO market in the foreseeable future. In addition, the influx of new types of investors with relatively aggressive risk-return profiles, coupled with financial innovation that has facilitated extensive redistribution of risk between market participants, was seen as supporting the activity. At the same time, market participants have expressed concerns about the potential behaviour of new investors and financial instruments if credit and market conditions were to turn less favourable.

All in all, while the likelihood of LBO activity posing systemic risks for the banking sector appears remote at the EU level, the survey results underlined the fact that behind recent rapid growth in the market some pockets of vulnerability could be developing. These could be particularly associated with the above mentioned expansion of secondary market activities. Due to the dynamic nature of the markets, banks should closely monitor their credit exposures and counterparty risks, while ensuring that adequate credit scoring and risk management techniques are always properly applied despite rising competitive pressures. At the supervisory level, banks' involvement in LBO activity warrants continuing close monitoring.

I INTRODUCTION

Over the past few years, a combination of solid economic growth and low inflation contributed to sustain particularly benign global financial market conditions, characterised by low interest rates and low volatility. This environment set a worldwide search for yield in motion among large international banks, saving institutions and various types of investment funds. The increased motivation of investors to raise exposures to investments with more aggressive risk-return profiles has provided new borrowing opportunities also for the corporate sector, which is being offered higher leverage, usually at low cost and through a greater variety of products. Against the background of such favourable financing conditions, there has been a surge in the financing of mergers and acquisitions (M&A) and in private equity operations, with some estimates putting the amount of funds invested worldwide by private equity investors in corporate buyouts at above USD 600 billion in 2006.

In broad terms, the private equity market provides medium- to long term capital to companies that are not quoted on a public equity market. It consists mainly of leveraged buyout (LBO) operations and venture capital activity. For the purposes of this report, only LBOs were taken into consideration, as venture capital has not experienced the same degree of development in recent years, is of a much smaller size and is generally driven by different factors. LBOs are not, strictly speaking, a new method of financing corporate takeovers in the EU. However, the recent dynamism of the market has enhanced its role and pushed large banks' involvement in LBO operations to the forefront. Indeed, banks have played a central role in supporting the rapid pace of growth of EU private equity markets: debt financing, syndication, as well as deal origination and creation of innovative debt structures have made banks necessary intermediaries in the EU LBO market.

These developments, together with the fact that the functioning of the EU LBO market has not yet been tested by a challenging environment, have prompted questions about the potential implications for financial stability.

FOCUS OF THE REPORT

The focus of this report is to analyse the nature and extent of large banks' involvement in private equity-sponsored LBO operations in the EU. In particular, the study – based on information provided by large banks by means of a survey – aims to shed some light on the potential sources of risk facing banks arising from their LBO operations. In this regard, potential interrelationships with other large debt, equity, and structured instrument markets are also important, as ripple effects of an LBO market downturn could have far-reaching implications in the case of an abrupt re-pricing of risk. Other issues related to LBO activity – such as a possible reduction in overall capital market efficiency due to the “public-to-private” transactions and potential problems of market abuse – have been pointed out by other observers and are not covered in this report.

PRIVATE EQUITY AS A MAINSTREAM FEATURE OF EU DEBT MARKETS

As in the US debt markets, private equity is now firmly established in the mainstream of EU corporate financing, accounting for more than a third of M&A activity in 2006. Moreover, growth of the market remains dynamic, with volumes of private equity deals rising steadily. Several factors can be identified as driving growth. On the one hand, private equity fund managers are expanding their activity, given the availability of both equity and debt financing and the large pool of potential acquisition targets with growth potential within the European corporate sector. The ability to structure transactions across national borders has also increased the range of accessible target companies. On the other hand, the growing focus of investors on shareholder value and higher yield have made private equity an accepted part of mainstream M&A.

Private equity fundraising has proved to be resilient and dynamic up to now. Two features, in addition to benign economic conditions, have been supporting this trend. First, the EU market has become attractive for foreign funds. Second, the growing acceptance of private equity as a viable and permanent asset class among institutional investors has resulted in a rise of institutional investors as major players in the private equity market. The emergence of a group of larger private equity funds with long track records has also played a key role.

BENIGN ECONOMIC ENVIRONMENT HAS FAVOURED STRUCTURAL CHANGES IN CORPORATE FINANCING

The hunt for yield in financial markets over recent years encouraged a wave of financial innovation, which created the new borrowing products and techniques but also made new LBO transactions more complex. LBO debt is now sliced into tranches and structured into products which cater for a wider range of risk appetites. As a result, borrowers can match debt much more closely to their anticipated cash flows and operate at a higher level of balance sheet efficiency and leverage. At the same time, these financial innovations allow investors to choose a tranche of a loan that more accurately reflects their risk appetite, allowing them to gain exposure to better risk-return profiles than might otherwise have been available.

Overall, under a benign phase of the EU corporate credit cycle, these changes have greatly improved the availability of external financing opportunities for EU corporations. Financial innovation has also made it possible for lenders to spread the risks wider in the financial system, thus allowing them to finance riskier projects.

POTENTIAL RISKS REQUIRE CLOSER MONITORING

From a financial stability point of view, the challenge faced by most of the players in the LBO market, including banks, is to take advantage of new financing opportunities without exposing themselves to unacceptable

levels of risk. Indeed, at some point in the future, the corporate credit cycle is bound to turn, giving way to a tougher economic environment, particularly for many LBO target firms obliged to generate high cash flows to service additional debts. Furthermore, the introduction of new products and techniques has created markets for instruments whose robustness has not yet been tested by less benign market conditions. The level of sophistication in the range of new debt instruments could also create complexity and confusion in cases of default, especially in identifying the entities who ultimately bear the risk possibly making distressed debt workouts more complicated.

Based on the survey carried out by the Working Group on Macroprudential Analysis (WGMA) of the BSC, this report outlines the involvement of large banks in private equity-sponsored LBOs in the EU and highlights the financial stability implications. To that end, this report forms a part of continuing efforts by EU central banks and supervisors to gain a better understanding of the impact of the development of new banking businesses, especially when they involve creative ways of transferring credit risk between various participants in the European and international financial system.

Like all surveys, the findings are subject to the limitations imposed by the quality of the banks' responses, the possibility that some questions could be subject to slightly different interpretations, or even possible differences in accounting principles applied in various countries. However, substantial effort has been made to eliminate inconsistencies, ensuring that the overall assessments made in the report are as accurate as possible.

2 OVERVIEW OF THE EU'S LBO MARKET

2.1 THE LEVERAGED BUYOUT MARKET – CONCEPTS AND CHARACTERISTICS

LEVERAGED BUYOUTS AS A PART OF PRIVATE EQUITY ACTIVITY

Leveraged buyouts are among the activities carried out by private equity companies. Private equity (PE) can be defined as medium to long-term equity financing of unquoted companies, or financing of the equity tranche of buyouts of public companies. The PE market has become an important source of funds in developed countries' corporate finance markets.¹ Although PE financing may be regarded as a relatively expensive kind of funding for firms, it can have a positive financial and strategic impact on their businesses, particularly if the involvement of the PE fund managers also leads to changes in the firm's management practices. For financial investors, private equity provides an alternative asset class with the potential for superior returns and portfolio diversification. At the macroeconomic level, PE allows capital to flow towards more viable projects and companies, and helps to finance new technologies, thus promoting employment and economic growth.

The specific financing needs of a PE target company mostly depend on its stage of development. For this reason, two main types of private equity funds – venture capital (VC) funds and leverage buyout (LBO) funds – can be identified. Venture capital funds mainly provide equity financing for companies that have undeveloped or developing products or revenues, and have limited access to the debt market; VC firms thus concentrate on enterprises in technologically intensive and less mature businesses.² In contrast, LBO funds are typically involved in debt-financed acquisitions of mature companies. Reasons for LBOs include the financing of corporate expansions, consolidations, turnarounds or sales of divisions or subsidiaries. The leveraged financing part of private equity business has expanded strongly over the past few years,

largely as a result of the low cost of issuing debt as well as the increasing numbers of investors and institutions which have been attracted by the relatively high rates of return in the market. This report focuses only on the LBO segment of the PE business.

THE LBO BUSINESS MODEL: EQUITY VERSUS DEBT INVESTORS

Within the EU, LBO funds and fund managers exist in a variety of legal forms. The particular choice of structure of a fund depends on the location and tax concerns of the fund managers and their prospective investors, as well as the relative benefits provided by the different legal and regulatory regimes that operate in different jurisdictions. Partly due to the fact that LBO firms often need to raise large amounts of capital, most large LBO funds are in practice domiciled in jurisdictions that allow for limited partnerships.

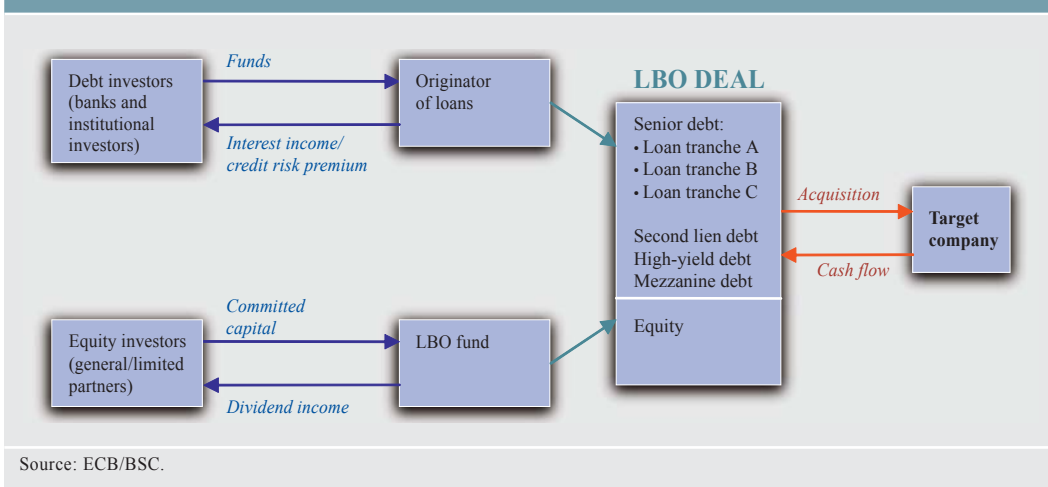
The business model of an LBO limited partnership is shown in a simplified form in Chart 1. At the start-up stage of the partnership *general partners*, who have limited (or in some circumstances unlimited) liability for the debt and obligations of the LBO partnership, invest significant amounts of their own funds (equivalent to between 3% and 5% of total equity raised by the firm) in the partnership. General partners are responsible for both undertaking investments and participating in the management of the target companies.³ The bulk of equity capital is collected from *limited partners*, typically involving dedicated players

1 According to European Venture Capital Association (EVCA) figures, private equity investments in 2005 represented 0.4% of the EU average GDP, up from 0.25% in 2001. Within the EU, Denmark received the largest share of investments relative to the size of the economy (1.2%) in 2005, followed by Sweden (0.9%), the UK (0.7%) and the Netherlands (0.6%).

2 Due to the dominance of equity investment in VC funds' business models, VC financing provides ways of raising funds without increasing leverage, while at the same time strengthening the balance sheet of the target company. Candidate target companies which are backed by VC are typically start-ups with positive business prospects and high potential growth.

3 In fact, the pre-LBO management of the target company and the general partners may be the same persons, in which case the undertaking would be called a "management buyout".

Chart 1 LBO structural and financial set-up



such as institutional investors, including pension funds, insurance companies and hedge funds and, to a lesser extent, banks, which commit to providing around 95% to 97% of the total funds raised by the partnership.⁴ Committed equity capital is subsequently pooled and normally it has to be invested in target companies and businesses by general partners within a given timeframe.

In practice, since research into potential targets and setting up deals is a time-consuming process, the general partners usually have the possibility to draw on committed equity funds while targets are being identified. Funds are subsequently returned to equity investors after the exit from the investment.⁵

Once target companies have been identified by general partners *debt capital* is raised from investors to help finance the takeover. The debt can be either concentrated on a holding company set up by the LBO fund or, as is often the case, lent directly to the target company. Debt is structured in several layers with different characteristics and seniority. The originators of these debt tranches (mostly banks) can either retain the debt or sell it on to institutional investors. After the LBO, the

target firms' cash flows are used to pay down the debt within the maturity of the project.

LBO partnerships are traditionally involved in long-term, highly illiquid projects which invest in target companies over a span of up to ten years.⁶ Consequently, committed equity investments in LBO partnerships are long-term placements, with investors obliged to remain committed for the total lifetime of the fund or until all of the stakes have been successfully divested. Table 1 summarises typical private equity fund terms.

When the investments of the LBO partnership mature, general partners need to liquidate, or "exit", the investment portfolio (i.e., the assets

4 However, some larger investment banks have established their own in-house private equity arms that compete in the marketplace with the independent partnerships.

5 The objective of the general partners is to increase the return on the funds and to enhance the partnership's track record for future takeover projects. The contractual arrangements that the LBO general partners draw up with limited partners on the one hand and targeted portfolio firms on the other hand partially mitigate the adverse selection and moral hazard problems that are prevalent when investments are made in firms with few or no publicly traded securities.

6 However, the more recent trend is towards shorter holding periods. Some market observers suggest that up to one-third of LBO investments are divested within three years.

Table 1 Typical LBO fund terms

Return objective	High absolute and sometimes relative returns against a specified stock market benchmark. Managers often co-invest their own money (1–3% of total committed funds) to create a higher level of confidence in the fund.
Investment strategies	To own target (portfolio) companies for a considerable period of time (several years), manage and improve them with the purpose of selling at a higher price. Some funds specialise by country and sector. Diversification requirements apply. Leverage is frequently used.
Incentive structure	The management fee is usually 1.5–2.5% of committed funds, plus 20% carried interest (performance fee, typically after investors receive their original investment back), plus a preferred return (hurdle rate). The details of fees and other expenses vary significantly. For example, carried interest can be calculated on a “deal-by-deal” or “fund as a whole” basis and can be subject to “claw-back” provisions which enable investors to recover carried interest if committed capital (plus any hurdle rate of return) is lost.
Subscription/withdrawal	Committed capital is drawn down on a deal-by-deal basis. On average, committed capital is invested over 3–5 years and then fundraising for the next fund starts. Realised profits are distributed to investors immediately.
Term	Partnerships are formed for 7–10 years and may be extended, if necessary, to permit the orderly realisation of any remaining investments.
Legal structure	The most common structure is a limited partnership that provides pass-through tax treatment (i.e. investment gains are not taxed at the partnership level and are passed on to investors) and limited liability to investors. Partnership agreements aim to protect investors (limited partners) from excessive risk-taking (e.g. diversification requirements) and aligning the managers’ (general partners’) interests with investors’ incentives (e.g. using a compensation scheme).
Managers	Managers may serve as general partners in private partnership agreements.
Investor base	Primarily institutional investors due to illiquidity, long-term investment horizon and unpredictable cash flows. High minimum investment requirements. Securities issued by LBO funds take the form of private placements.
Source: ECB/BSC.	

of the target companies) at the highest possible price in order to make a profit and maximise the returns for equity investors. Indeed, since the proceeds of the investment can only be distributed by exiting the investment (or via a dividend recapitalisation⁷ – see later), effective and efficient exit strategies at maturity are crucial for potential investors in LBO partnerships as these will ultimately determine the final returns to the funds invested. Identification of profitable exit routes *ex ante* therefore also facilitates successful fundraising.

The four main exit routes from LBOs are: initial public offering, trade sales (i.e. sale to another corporate), secondary sales (i.e. sale to other PE funds) and recapitalisation. The preferred strategy will depend on a number of aspects that can be related to the characteristics of both the target companies and/or the LBO partnership itself, as well as to external factors, such as market conditions and the macrofinancial environment. At the time of exit from an

investment, the returns to limited partners include the proceeds of their investments at maturity. The general partners’ income consists of carried interest and various management, transaction and monitoring fees (see Table 1 for details).

Unlike equity financing, debt financing of LBO projects is typically deal-specific and involves several layers of seniority. The expected returns to debt holders greatly depend on their position in the seniority structure, with some new forms of debt becoming increasingly comparable with equity in terms of risk characteristics. It is important to note that because the legal agreements supporting the debt financing are often between the lender and the target company, the debt financing component may remain unchanged when the LBO partnership sells the target company.

⁷ Refinancing or recapitalisation of the project before the final exit allows the general partners to achieve early profit realisation.

Debt providers for LBO transactions are typically banks which may, but often do not, also invest equity in the same LBO partnerships as limited partners. The debt structure of an LBO deal is illustrated in Chart 1 and it generally includes some or all of the following elements: Senior loans, consisting of revolving facilities and senior loan tranches A, B and C, second lien loans, mezzanine loans, high-yield bonds and payment-in-kind (PIK) notes.

Senior loans are the dominant and, from the debtor's point of view, the cheapest source of finance for LBO transactions, being secured against the target company's assets and shares. Senior debt is generally issued in various tranches, each of which features different risk profiles and repayment conditions. Aside from the revolving loan (essentially an overdraft facility), "Senior A" debt tranches (or "Term Loan A") are the safest type of debt, traditionally characterised by a fixed amortisation schedule with maturity between six to seven years. Lower grade senior debt tranches, such as "Senior B" and "Senior C" (or "Term Loans B and C") typically feature "bullet" structures according to which debt carries no periodic capital repayments and is repaid in full at maturity. The bullet-types of debt allow target companies to take on higher leverage multiples as the back-ended amortisation schemes relieve cash-flow pressures by avoiding debt servicing during the first years of investment. Evidently, reflecting the higher risk involved, lower-rated senior debt tranches also carry higher interest margins.⁸

High-yield debt and mezzanine debt are additional components of the typical LBO capital structure. Along with the interest payment, this type of debt can have equity-based options such as warrants attached to the debt obligation or a debt conversion feature (although the latter are quite rare these days). Being subordinate to both senior and high-yield debt, mezzanine capital is more expensive for the issuers due to the higher degree of embedded credit risk. The term period of mezzanine debt usually exceeds five years and the principal is repaid at end of the term.

During the past few years new layers of the LBO capital structure, such as second lien debt, have been introduced in the EU's LBO market. Second lien debt can be described as a mix between senior and mezzanine debt with respect to terms and conditions.⁹

For large LBO deals, banks also extend bridge loans, whose purpose is normally to provide interim finance until longer-term finance can be put in place. These facilities have short maturities (from three to 24 months), are normally undrawn and are either repaid by or commuted into a subsequent permanent financing once the longer-term finance (e.g. high-yield bonds) has been issued. Bridge loans carry relatively high interest rates but include limited collateral requirements, and they typically include incentives for early redemption.

The wide choice of available debt instruments provides greater flexibility for the target companies to adjust the debt repayment schedules while permitting a higher leverage level compared with traditional bank debt. The "ideal" debt structure generally depends on the size of the transaction, with a wider range of subordination being more common for larger transactions.

For all types of debt issued for LBO transactions, fixed interest rates have gained popularity in the EU market. In addition to the delayed amortisation, fixed interest rates further

⁸ More recently, there are signs that the B and C tranches of the senior debt (with a maturity of eight to nine years, and repayment mostly in non-amortising bullet form) have gained in importance in EU LBO deals at the cost of the more senior amortising A tranches (with a typical maturity of seven years). This trend follows the practices which have been in place in the US LBO market since the 1990s. Historically, a typical EU LBO deal had the bulk of the debt in the amortising A tranche, with well under 50% in bullet tranches, whereas today – especially in large transactions – up to 60-80% of the debt could comprise non-amortising bullet tranches.

⁹ This type of debt ranks *pari passu* with the right of payment of senior debt, but it is secured on a secondary priority basis to the senior debt. In other words, second lien debt is subordinate to senior debt only in terms of collateral proceeds: if the collateral needs to be liquidated, senior debt creditors have the priority on the cash proceeds of the collateral.



“insulate” LBO projects from short-term cyclical developments by moving the interest rate risk to banks and the end holders of the debt.

CHARACTERISTICS OF TARGET COMPANIES

The expected success of a prospective LBO project is conditional on the future cash-flow generating capacity of the target company. From this point of view, “ideal” targets for LBOs have traditionally been identified in mature industries which generate high and steady cash flows and which have deployable assets that can easily be pledged as collateral. In contrast, debt would be a risky form of financing for firms in industries open to economic cycles. Chart B in Box 1 illustrates the breakdown of recent LBO activity in the EU according to industrial sectors. It shows that a substantial share of the LBOs in the EU has indeed been concentrated in industries that are characterised by rather “predictable” cash flows and/or readily deployable assets, such as utilities, chemicals and media. In contrast, sectors with growing or more volatile revenues, such as IT or biotechnology, are only starting now to be targeted by LBO partnerships. This could reflect the fact that the limited pool of target companies and the growing risk appetite among LBO partnerships amid past successful turnarounds have encouraged a search for

investment targets in industries with less predictable cash flows. At the same time, the new complex and flexible debt structures allow for riskier LBO operations to be arranged, facilitating the penetration of previously untapped sectors where cash flows and assets may be more exposed to economic cycles.

2.2 KEY DRIVERS OF RECENT LBO ACTIVITY IN THE EU

The combination of benign macroeconomic and financial conditions that took hold gradually after the correction of the global stock markets in 2000-01 has been conducive to the rapid expansion of activity in the EU’s LBO sector. In addition, financial innovation has been an important catalyst for complex funding structures that have allowed LBO partnerships to pursue larger deals with higher leverage multiples. From the point of view of target companies, rising input costs and greater competitive pressures globally have brought about new challenges for businesses in several industrial sectors, providing an impetus for companies to engage in extensive restructuring and development projects. The expansion of LBO activity has provided a larger set of companies with access to leveraged financing and allowed them to become more aggressive in using debt.

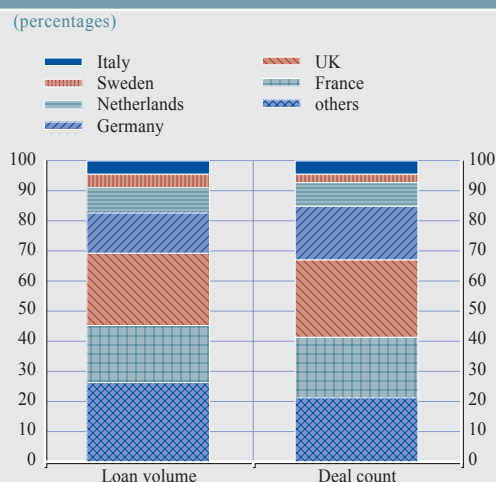
Box 1

INDUSTRY SNAPSHOT – EUROPEAN LEVERAGE BUYOUT¹

After the positive growth reported in 2005, 2006 was yet another prosperous year for the EU private equity industry, as measured by several alternative metrics. LBO transactions remained the main activity area for the PE industry, with over 80% of the capital raised earmarked to LBOs, up from around 65% in 2004. The benign economic environment, ample global liquidity and the emergence of new credit suppliers contributed to this expansion. Indeed, despite increasing short-term interest rates in all major economic areas in 2006, the expansion in the LBO market persisted – albeit not as fast as the growth rate registered in 2005. Nevertheless, 2006 proved to be an exceptional year in respect of LBO transaction volumes and deal counts. The amount of loans issued for LBOs reached nearly €120 billion, whereas the number of deals amounted to nearly 250. Based on loan volume and deal count, France, UK and Germany remain the most active EU countries in the LBO industry (see Chart A). The performance of

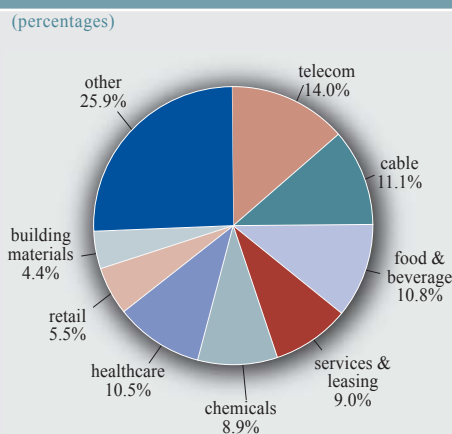
¹ Unless otherwise stated, the data source for Box 1 is Standard and Poor’s European Leveraged Buyout Review Q4 2006.

Chart A LBO – Issuer country diversification by loan volume and deal count, 2006



Source: Standard and Poor's.

Chart B LBO diversification by industry (in loan volume), 2006

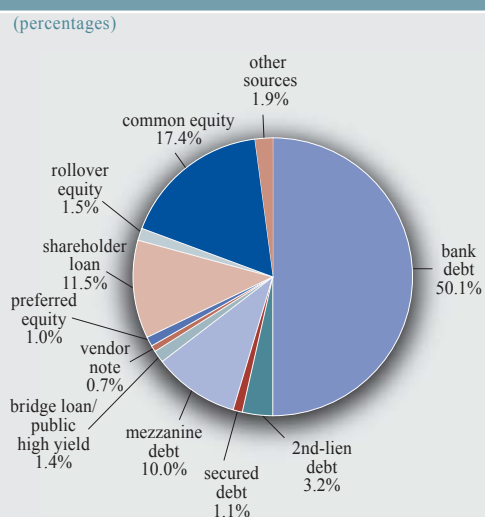


Source: Standard and Poor's.

the LBO industry has also shown considerable improvement, with long-term performance (measured by ten-year buyout returns) increasing by nearly two percentage points over 2004 to reach 14.3% as at end-2006.

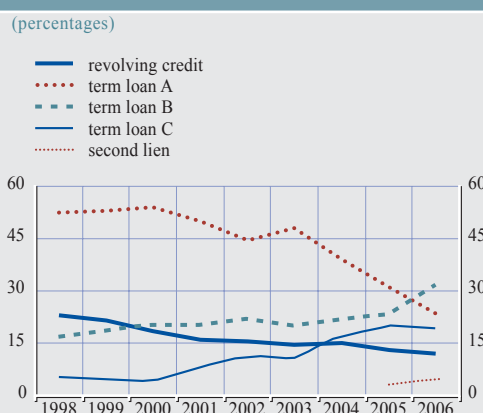
The LBO market may be regarded as fairly diversified in terms of invested funds by industry. The telecom industry accounts for the largest amount of invested funds, while five other major industries account for a roughly equal share of total invested funds (see Chart B). The industry diversification has increased significantly since 2005, when nearly half of total invested funds went into the telecom, cable and chemical sectors.

Chart C LBO sources of proceeds, 2006



Source: Standard and Poor's.

Chart D Bank loan structure of LBOs



Source: Standard and Poor's.

In 2006, bank debt remained the main source of funds for LBO transactions, accounting for half of total LBO proceeds (see Chart C). The bank loan structure of LBO transactions in Europe may, however, still be regarded as fairly conservative. In fact, senior tranche A debt accounts for around 23% of the total bank loan structure – a considerably higher share than in the US market, where senior tranche A debt accounts for merely 0.8% of the total bank debt to LBOs. The strong competitive pressure in the EU’s LBO market has increased the risk appetite of potential creditors, as manifested by the increasing proportion of riskier debt in LBO transactions (see Chart D). Nevertheless, despite an increasing proportion of riskier debt, the average three-month rolling spread for senior tranche B and tranche C debt is trending downwards, reflecting the current benign credit risk environment, but also the intense competition for LBO deals and the increasing demand for high-yielding debt.

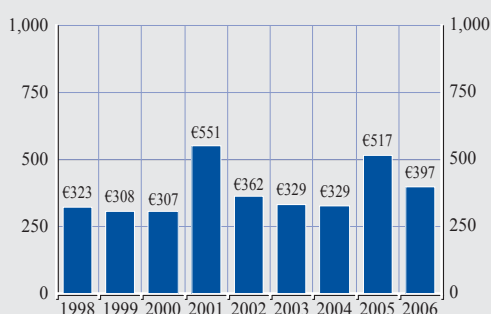
The average value of LBO deals in 2006 was €397 million, relatively lower than the average deal size of €517 million in 2005. Evidently the heavy investment in 2005, which had pushed up the average deal size, was not matched in the following year. Nevertheless, the average deal size in 2006 is still higher than the average deal size reported prior to 2005, reflecting the ongoing development of the LBO industry, as well as the continued influx of capital (see Chart E).

Idle cash seeking attractive investment returns has also impacted on the purchase price of LBOs. Following the deceleration triggered in 2000, the purchase multiple (i.e. purchase price as a multiple of EBITDA) of LBOs in Europe peaked at 8.4 times in 2006 – exceeding the robust levels reported in 1998. Similar trends can be identified for the total deal proceeds multiple (i.e. total proceeds as a multiple of EBITDA), which also exceeded the peak registered in 1998, standing at 8.8 times as at end-2006 (see Chart F). The prolonged low interest rate environment over the past few years has been one of the main factors pushing this multiple up, where senior debt has been the fastest growing segment of the total funding of LBO transactions (or total proceeds). Looking forward, industry participants suggest that higher interest rates may eventually start affecting borrowers’ appetite for new debt, which in turn could decelerate the momentum of the total proceeds multiple in the coming years.

2 EBITDA stands for earnings before interest, tax, depreciation and amortisation.

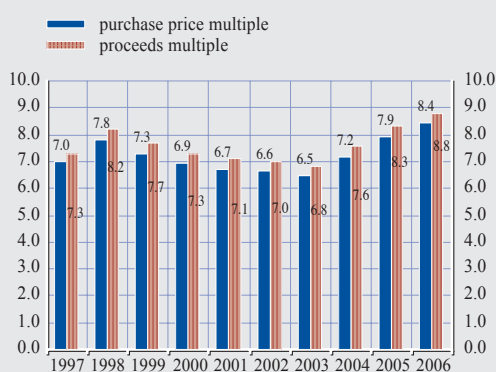
Chart E Average deal size of LBO

(EUR millions)



Source: Standard and Poor’s.

Chart F Purchase and total proceeds multiples



Source: Standard and Poor’s.
Note: Total proceeds include senior debt, subordinated debt, equity and other debt.

AMPLE GLOBAL LIQUIDITY AND BENIGN CREDIT CONDITIONS

Given the low risk-free rates of return, investors driven by the search-for-yield phenomenon – either portfolio managers or institutional investors seeking to match their guaranteed return policies – have found equity investment in LBO funds attractive despite the inherently illiquid nature of such placements. However, market observers and industry participants tend to agree that a primary driver of the recent expansion of the EU's LBO activity is the easy access to debt financing, fuelled by the ample supply of liquidity and the protracted low interest rate environment.

At the same time, the general decline in both macroeconomic and financial market volatility has supported investors' appetite for risk and encouraged new types of player to allocate a share of their funds to "alternative asset classes" – such as hedge funds and private equity – either as equity or debt investors. Against this background, private equity/LBO has established itself as a generally accepted investment vehicle for institutional investors, generating relatively high returns but also providing diversification benefits.

An important remark is that the current global excess liquidity and the search-for-yield phenomenon have coincided with an upturn in the global credit cycle – reflected in a decline in corporate default rates to historically low levels – that has increased investor confidence and fuelled larger deals involving increasingly lower-rated target companies. The previously relatively untapped potential of the M&A and corporate debt market in the EU has provided an additional boost to the activity. Coupled with the gradual decline in the number of attractive target firms in the US, foreign investors' interest in the European LBO market has grown steadily.

FINANCIAL INNOVATION

The LBO market has proven to be rather accommodative to the influx of funds, showing considerable flexibility in the debt structures in

order to meet various investors' preferences, strategies and desired level of risk exposure. Intensified competitive pressures have also fostered innovation within the LBO market. Innovation has particularly manifested itself in the increased ability of the market to re-package, trade and sell down credit risk, which has enabled debt providers to spread risk wider. The wider distribution of syndicated loans, "club deals" involving several LBO partnerships, hybrid funds etc. have all contributed to enhanced risk-sharing and have enabled the arrangement of record-breaking deals.

Apart from the innovative practices developed by industry practitioners themselves, an important factor supporting growth in LBO activity relates to the financial instruments that are used for risk management purposes and which have been adapted to the needs of the LBO market. For banks which provide deal-specific debt finance for LBO projects, loan syndication has traditionally been one of the primary risk management tools, allowing them to sell down their potentially very large deal-specific debt exposures. The expansion of the credit derivatives market has further enhanced the debt exposure risk management by allowing banks to distribute the default risk to third parties who are more willing to bear it. New instruments designed to hedge credit risk exposures in the loan markets, such as loan credit default swaps (LCDS), which are derivatives written on underlying loans and insure investors against borrower defaults, help to mitigate risk exposures further.

DEVELOPMENT OF SECONDARY MARKETS

Over the recent years, the emergence and development of the secondary market for LBO deals has improved the liquidity structure of LBO investments. The increasing specialisation of LBO partnerships in particular phases of the corporate re-structuring/turnaround processes (e.g. taking a public firm private, various stages of re-structuring of the firm, or arranging the IPO) has enhanced the role of secondary sales as an exit strategy and shortened the investment

periods of individual partnerships. While the development of the secondary market for deals has provided investors with liquidity in a fundamentally illiquid asset class by increasing the variety of exit options, LBOs are still regarded as rather illiquid compared with other financial market investments. Moreover, the secondary market for LBO deals has not yet been tested, especially in terms of potential episodes of illiquidity.

A secondary market has also been introduced for senior loans. Typical buyers of such loans are managers of collateralised loan obligations (CLOs) whose asset pools require large amounts of debt, which generate steady high yields up to maturity, and, to a lesser extent, dedicated credit hedge funds. It is possible that the enhanced liquidity provided by the loan secondary market could have encouraged investors to allocate additional funds to LBO partnerships, from which new LBO deals can be sourced.¹⁰

2.3 EVOLVING CHARACTERISTICS OF LBO DEALS

By nature, LBO deals tend to be aggressive as regards both pricing and leverage. However, diversification, or syndication of exposures among different types of investor effectively mitigates banks' credit and concentration risks, with banks typically ending up holding the less risky senior debt tranches. Moreover, as long as a liquid secondary market exists for both deals and debt, banks' liquidity risks are likely to remain relatively limited. At the same time, however, it cannot be excluded that the increasing trend towards recapitalisation of deals as well as the growing popularity of covenant-light, back-ended amortisation structures may be hiding burgeoning risks and delaying the occurrence of default problems in the market.

DEBT DISTRIBUTION AND BANKS' LBO BUSINESS MODELS

After underwriting the initial financing for an LBO transaction (and perhaps a bridge loan to a high-yield bond), banks may initially hold

very high exposures to the deal. Banks thus aim to distribute the debt exposure among investors in order to reduce their credit and concentration risk. Prior to entering the actual debt financing phase, banks aim to protect themselves against the inability to pass on debt exposures by carefully assessing the opportunities to syndicate the deal or otherwise reduce their credit risk exposure. Indeed, the mandated lead arranger(s) as well as the underwriters typically assess the possibility of syndication right from the inception of the deal. If banks after the syndication are still left with undesirable credit exposures, these can be usually disposed of in the secondary markets.¹¹

After syndication, leading banks typically retain some debt, in which the precise share may depend on the assumed risk of the transaction and the bank's LBO business model. For this survey, two main LBO business models were identified. The "portfolio" business model generally involves commercial and retail banks providing leveraged finance with the aim of retaining a share of the debt in their books to generate interest income and diversification benefits. This model also involves banks setting up the transaction and/or entering into deals organised by other banks. The portfolio approach generates fees from arranging the deal financing and interest revenues from holding the positions.

The "capital turnover" business model in turn is typically adopted by investment banks and generally entails the distribution (via syndications, assignments and sub-participations) of (nearly) all of the debt to other market participants, reducing banks' economic risk exposure. This approach, which

¹⁰ It has been suggested that links between financial innovation and the LBO cycles have also existed in the past. In particular, the 1980s LBO boom in the US coincided with the introduction of the junk bond market that, at the time, facilitated the financing of the LBO transactions.

¹¹ Smaller LBO transactions are still often conducted by a single lender. In such cases, if the bank does not intend to bear all the risk of the credit facility alone, the borrower can mandate a group of banks to arrange a syndicated loan, whose funding is provided by a group of lenders.

also involves extensive use of credit derivatives, focuses on earning fees rather than interest revenue.¹²

Industry sources suggest that in the current favourable market conditions, LBO partnerships are in a rather strong position to choose the underwriting banks. Indeed, a typical procedure for an LBO fund to choose the lead underwriter(s) is via a competitive auction. The mandated lead arrangers can subsequently directly influence the terms and conditions of both the deal financing and syndication according to their chosen business model. However, the prospective debt investors also have bargaining power in the syndication process owing to the fact that the lead arranger is dependent on the success of the syndication to reduce its risk concentration.

RECAPITALISATION OF DEALS AND LOAN COVENANTS

After the LBO deal has taken off there is a possibility to further increase the leverage ratio by general partners making additional debt capital calls and thus injecting new debt into the target company. The reasons for recapitalisations can vary between the target company's need for additional funds for investment, temporarily ailing cash flows that may threaten a breach of existing loan covenants, or desired additional dividend payments for equity holders. Given the ongoing favourable business environment, recapitalisations for dividend payments have increased in popularity.

Needless to say, any additional debt to be added to the target company's balance sheet may dilute the position of the existing bond holders and can generally only be achieved with the consent of all syndicate members. Despite the fact that LBO managers have generally produced good financial results that, in addition to protracted favourable borrowing conditions, have often justified the requests for additional dividend payments, it is not entirely uncommon for banks as syndicate participants to reject requests by the LBO managers to recapitalise the deals.¹³

The reasons for refusal can be related to the excessively aggressive structure of the proposed refinancing (i.e. the leverage ratio after the refinancing is considered too high), too high proposed dividend payments, the fact that equity or subordinated instruments have been taken out of the deal, or that loan covenants have been weakened. An additional reason for a refusal may be that entrepreneurial risk is being shifted to creditors, e.g. if major synergy potentials have already been exhausted in preceding recapitalisations or the increased debt service burden is no longer supported by the prospects for future cash flows.

Banks as debt holders are generally seen as more reluctant to allow recapitalisations to go ahead than institutional investors, such as CLO managers and hedge funds. This is because CLO arrangers in particular permanently need to source assets to avoid cash holdings and are therefore very reluctant to withdraw from existing loans. The increasing presence of such investors in the LBO syndicates and secondary markets has increased the pressure to include clauses in the syndication agreements that allow recapitalisations to go ahead with a majority vote or if individual syndicate members fail to react to requests for recapitalisation within a given notice period.

Regarding the evolving practices for loan covenants, market participants indicate that the growing influence of institutional investors and tight competition among banks on LBO origination has contributed to an increasing tolerance of loan covenant breaches, which are often dealt with via cash injections or outright recapitalisations. In newly arranged LBO deals, the enhanced bargaining power of investors with more aggressive risk-return profiles has

¹² In addition, investment banks are often important advisers to LBO funds in sourcing deals, executing transactions and floating firms on public markets. Not surprisingly, a significant share of the revenues of many large investment banks is derived from debt capital, advisory and M&A activities.

¹³ However, this view is contested by some market participants who tend to describe banks as keen supporters of leveraged recapitalisations, attracted by transaction fees and the possibility of sourcing new loans.

contributed to an increasing use of “covenant-light” structures whereby loan covenants are kept at a minimum from the outset of the deal.

All in all, it can be concluded that as the EU’s LBO market has rapidly expanded over the past two to three years, the evolution in the market practices has been towards increasingly debtor-friendly conditions in deals and transactions.

3 SURVEY RESULTS

SAMPLE AND SCOPE OF THE STUDY

The survey conducted for this study comprised a qualitative and quantitative set of questions submitted to banks selected according to their size and relevance in the EU leveraged buyout market. A total of 41 banks, of which 30 are domiciled in the EU and 11 are non-EU financial institutions participated in the survey. The group of EU banks covers a significant share of total EU banking assets and the group of non-EU institutions, domiciled in Japan, Switzerland and the US, are large global banks, although only the activities conducted by affiliates in London was considered in the survey. In total, 11 countries participated in the qualitative part of the survey: Belgium, Germany, Spain, France, Italy, the Netherlands, Austria, Portugal, Sweden, the United Kingdom and Denmark, and the first ten countries have also submitted quantitative replies. While most of the largest players in the EU leveraged buyout market were covered in the survey, some banks domiciled in few EU countries which did not participate in the study may have been left out. The wide coverage and the good response rate to a very detailed questionnaire, however, should ensure that the report provides a comprehensive snapshot of banks’ involvement in the leveraged buyout market and the relevance of exposures to the risks stemming from it.

The sample of surveyed EU banks comprised only large players in the banking industry with total assets of at least €80 billion, but which in a few cases exceeded €1,300 billion. The quantitative information comprised total LBO

exposures (including debt and investment exposures) at two points in time: June 2005 and June 2006 and detailed characteristics of the top five LBO transactions during the 12 months to June 2006. Few country-specific elements seem to be relevant in determining the features of banks’ involvement in the European LBO market: indeed, its main characteristics and trends appeared quite similar at the EU-wide level, even though some national markets are clearly at a more mature stage of development than others.

The results below do not focus on extensive cross-country or geographical comparisons unless this approach adds value or provides a better understanding of the analysis of results. Throughout this chapter, charts do not always cover the full sample since this was in some cases not possible due to missing data or data integrity problems.

HOMOGENEOUS DEFINITIONS OF LEVERAGED BUYOUT

Surveyed banks shared a quite similar working definition of an LBO, which ensured a common basis and satisfactory degree of data comparability in assessing banks’ exposures to LBO transactions. In broad terms, and unlike other customary corporate lending, LBO lending consists of debt provided to finance an acquisition of a target company, via a managed fund, often rendering it highly leveraged. The debt provided is typically not just senior debt but includes a variety of subordinated debt which increases the risk of default, since interest payments (and embedded leverage) are higher and the investment is typically unsecured. Another important distinction between LBOs and other forms of commercial debt, very relevant from the banks’ point of view, is that the payment of debt is highly dependent on the future cash flows of the target company. Additionally, an LBO transaction involves financial sponsors (private equity fund(s)), which finance the equity part of the target company acquisition.

Although according to the replies, banks normally apply their general regulations to

LBO transactions, banks underlined that LBO operations are treated with special attention, recognising the risk, particularly due to the large amounts of money involved, as well as due to the various debt structures carrying different risk level. In fact, most banks have dedicated units, teams or business areas handling LBO transactions. In addition to the general regulations, banks mentioned the adoption of special regulations and operational standards, such as guidelines for risk assessments, the limits on exposures and tranche benchmarks (see Section 2).

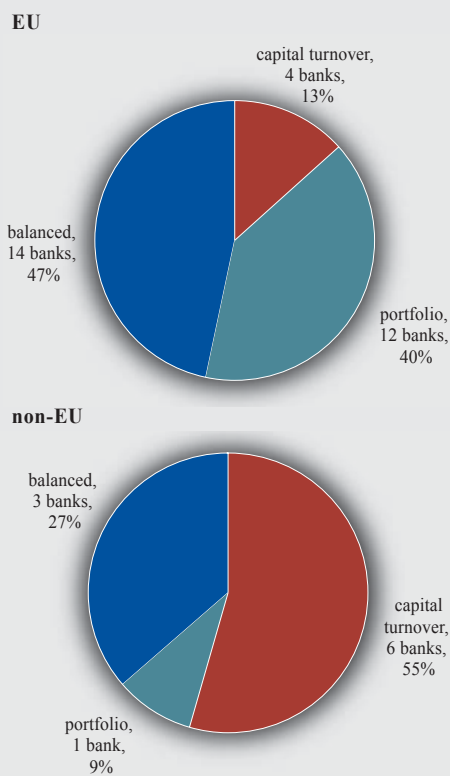
A significant number of LBO transactions carried out by the surveyed banks were relationship-driven as opposed to transaction-driven (in fact, only a few banks stated that their LBO deals were exclusively transaction-driven). Nevertheless, despite the fact that most of the deals tend to be carried out on a relational basis, banks stated that it was necessary to carefully assess the risk embedded in such deals and the individual assessment of LBO transactions. Relation-driven transactions were very often based on direct contacts between the bank and the ‘customer’, the private equity fund manager, as well as on past transactions and history. In particular, it was noted that national deals tended to be more relationship-based, whereas international deals were more often transaction-driven.

BANKS’ BUSINESS MODELS

Banks were asked to define their business model for LBO financing according to the following classification. Banks whose participation in LBO transactions was mostly oriented towards raising fee income and a rapid distribution of credit exposures were classified as “capital turnover” banks (an approach typically followed by investment banks), while banks tending to keep a significant share of exposures longer on their books and whose participation in the LBO market was motivated by fee but also interest income from holding the debt positions were referred to as “portfolio” banks. Such positions could also be obtained by participating in transactions arranged by other banks, thus ensuring a diversified portfolio.¹⁴

Chart 2 Banks’ business models

(June 2006, percentages)



Source: BSC.
Note: Based on a sample of 41 banks. One non-EU bank that did not report a business model was re-classified as “Balanced”.

Only 13% of banks from the EU sample have classified themselves as capital turnover banks against 55% of the non-EU sample (see Chart 2). This suggests that the bulk of EU banks could be more exposed to LBO activity through pure credit exposure than affiliates of non-EU banks operating in the European LBO market. This self-classification should however be interpreted with caution since the reporting banks may have different understandings of what these concepts mean in practical terms. It is also important to note that few banks actually followed exclusively the capital turnover or the portfolio model but rather combined features of these two approaches. For example, some banks

¹⁴ This distinction was first proposed in “Private Equity: a discussion of risk and regulatory engagement”, UK FSA discussion paper No. 6, 2006. See also Chapter 2.

that classify themselves as portfolio banks also proved to dispose of debt via syndication and some capital turnover banks apparently did not aim to distribute down exposures to zero, thereby also earning interest revenue from holding the positions. The business model characterisation should hence be viewed only as indicative of the predominance of the capital turnover, portfolio or balanced features in depicting banks' involvement in the European LBO market.

Surveyed EU banks nevertheless expressed the expectation that their LBO operations will move (or are moving) towards a capital turnover business model. The development and depth of the secondary loan market has facilitated loan syndication, encouraging banks to offload part of their exposure, while benefiting from greater fee income. Additionally, the increasing use of credit derivatives in the LBO industry has assisted banks in transferring their risk, further contributing to their detachment from the 'pure' portfolio model approach.

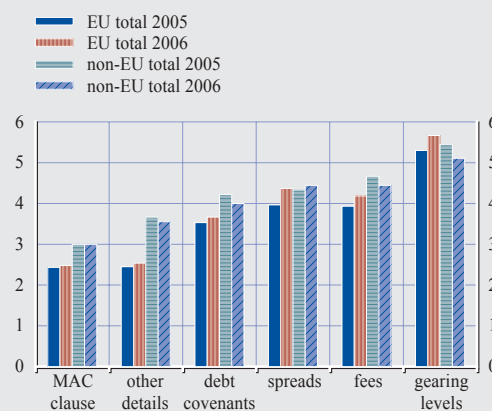
For the purposes of the quantitative analysis in this report, data are generally presented according to banks' business models since this aggregation appeared to be more meaningful than one based on geographical breakdown. However, occasionally the analysis can be conducted on an EU versus non-EU basis if found more appropriate, or if missing data impedes a proper aggregation by business model.

COMPETITION AMONG BANKS INTENSIFIED

Survey replies confirmed the view that competition is intense, between banks participating in the LBO market, and has become more intense over the last year (from June 2005 to June 2006). Banks were asked to rank the relevance of five areas in which competition is perceived as being high (see Chart 3): gearing levels, fees, spreads, debt covenants, the "material adverse change" clause (MAC) and other possible details. In general terms, MAC clauses aim to give participants (debt or equity providers) in an LBO transaction the right to terminate the agreement before completion, or to provide a basis for renegotiating

Chart 3 Competition intensity

(ranking between 1 and 6)



Source: BSC.

the transaction, if events occur that are seriously detrimental to the target assets/company. Chart 3 shows the geographical split (as opposed to the split by bank business model) since non-EU banks appeared to be at a more advanced stage of the cycle, with respect to LBO financing, than EU banks. Surveyed non-EU banks perceived some decline in competition pressures, e.g. in respect of transaction contractual terms, while competition was apparently still increasing in the view of EU banks.

Surveyed banks considered that competition had generally intensified in the 12 months to June 2006, and was particularly strong on the degree of leverage associated with new transactions (gearing levels). Anecdotal evidence and market commentary suggest that private equity sponsors have not taken as much leverage as was offered to them by banks in 2006. Non-EU banks though perceived that competition in gearing levels had to some extent declined over the last year.

Surveyed banks tended to agree that competition in fees and spreads charged to LBO sponsors had also increased, though it took a lower position in the competition ranking. Market commentary shares the view that competition among banks is centred on product innovation

and the complexity of leverage instruments rather than on price. Competition in transactions' debt covenants – i.e. making covenant packages more flexible (so called *covenant-lite*) – was also considered relevant in the banks' view. Competition in covenant packages contributes to reducing the effectiveness of covenants as early warning mechanisms for investors when firms are in financial difficulty, rendering covenant-lite debt structures a potential supervisory concern. While competition in the MAC clause appeared to be, in general, less relevant for banks active in the LBO market, its importance was not negligible as a competition parameter for the capital turnover banks.

In their replies to the survey, banks underlined that competitive pressures were to some extent alleviated by accurate and extensive research and analysis, which enabled banks to adequately price deals without over-exposing themselves to risks in the market (see section 2 on due diligence and limits). Deep knowledge of the customer and also of the industry sector's characteristics was also mentioned as an important tool for assessing the risk-return trade-off of the deal and for enabling adequate pricing.

Banks also recognised the fact that having a strong affiliation and a good reputation with

the customer – relationship-driven transactions – could help to ease competitive pressures.

3.1 BANKS' EXPOSURES TO LBO ACTIVITY

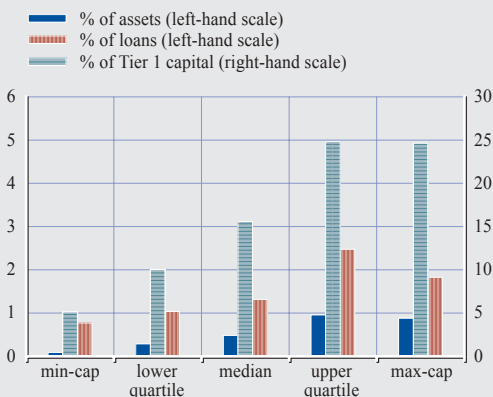
CREDIT EXPOSURES REMAIN MANAGEABLE IN VOLUME

Banks' credit exposures arise from lending activities comprising e.g. underwriting activities, arranging and syndicating debt packages, providing bridge finance and taking on debt tranches. LBO financing may not have to be provided upfront in its totality. Banks' debt exposures to LBO financing also includes commitments, i.e. financing that should be provided on request after the finalisation of an LBO transaction. According to survey results, credit exposures of reporting banks appeared to be generally moderate when expressed in terms of the banks' own funds (tier 1 capital) or total assets. Chart 4 covers only the EU sample since figures reported by non-EU banks were not fully comparable.¹⁵ Figures were fairly small in

15 The median value of debt exposure as a share of tier 1 capital was around 15% for a sample of EU banks even though the third quartile was close to 25%, indicating that figures can be very high for a significant number of banks. The median value for non-EU banks was 22%. However, this result should be read with caution as the figure could be biased upwards since own funds and total assets of some institutions may refer to the affiliate and not to the parent institution.

Chart 4 EU banks' LBO net exposures as share of total assets, total loans and tier 1 capital

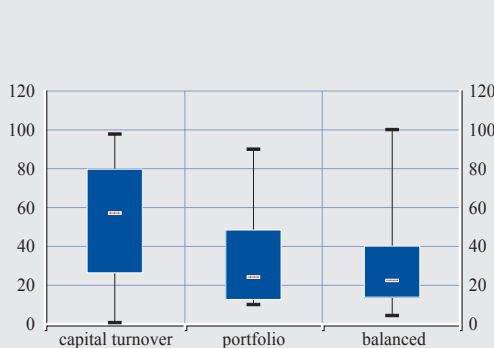
(June 2006, percentages)



Source: BSC.

Chart 5 Concentration of top five deals in total LBO portfolio by business model

(June 2006, percentages)



Source: BSC.

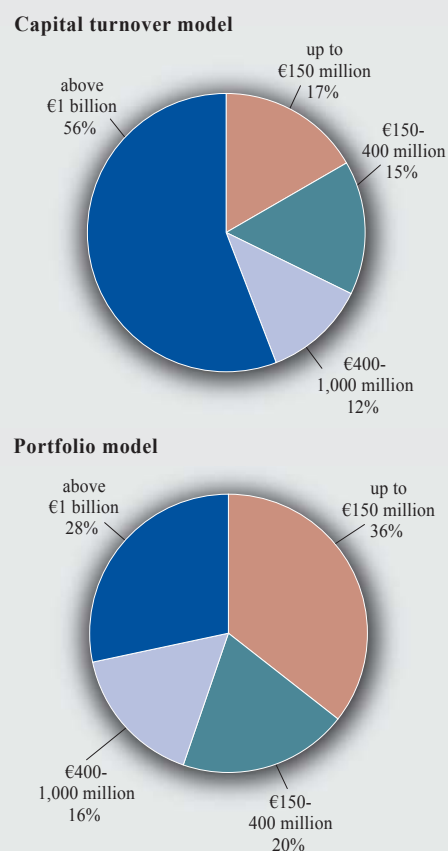
terms of balance-sheet totals since, for three-quarters of the EU-surveyed banks, exposures represented less than 1% of total assets. In absolute terms, LBO debt exposure of all surveyed-EU banks was around €100 billion in June 2006. It should be noted that net exposures are generally limited due to the capital charges that tend to be high for this type of credit in order to ensure sound buffers to absorb potential losses. In addition, the large exposures' regime, by which banks regularly report exposures above a sizeable threshold to particular counterparties, closely monitored by supervisors, also prevents banks from holding exposures to single names for extended periods.

There was also an indication that exposures were mainly concentrated on banks' top five deals, especially among banks adopting the capital turnover approach. For this category of banks, the median value of net exposures to the largest five transactions as a fraction of total LBO net exposures was just below 60% (see Chart 5). Concentration levels were more modest for banks closer to the portfolio and balanced models, for which the median was just above 20%. Concentration of LBO exposures on the top ten transactions proved to be significantly higher for the capital turnover banks, for which the median value stood at almost 75% (see Chart S1 in the Annex).

The total size of an LBO transaction reflects the size of the holding structure consisting of an equity part and the various debt tranches (see Chapter 2). The following charts focus on the overall size of LBO transactions in which the surveyed banks participated and not on banks' actual exposures to those transactions. The distribution of LBO transactions by size across the EU-surveyed banks appeared to be a function of the business model followed. As of June 2006, portfolio banks participated predominantly in smaller deals (of less than €400 million), whereas almost 60% of transactions involving capital turnover banks were large deals (in excess of €1 billion), as depicted in Chart 6. The deal size distribution for balanced banks lay somewhere between the

Chart 6 Sizes of LBO transactions according to banks' business model

(June 2006, percentages)



Source: BSC.

other two models, with almost 40% of transactions being large (see Chart S2 in the Annex).

Interestingly, it could be argued that some banks tend to specialise in small deals, whereas others appear to concentrate mostly on large deals (see Chart 7). For a number of banks on the bottom-right of the chart, exposures to small transactions were close to zero and around 80% or more of exposures to LBO transactions concerned large deals. Alternatively, a group of banks, (mostly classified as portfolio or balanced) reported zero exposures to transactions of more than €1 billion, while more than half of LBO debt

Chart 7 Concentration of exposures of each bank according to size of transaction

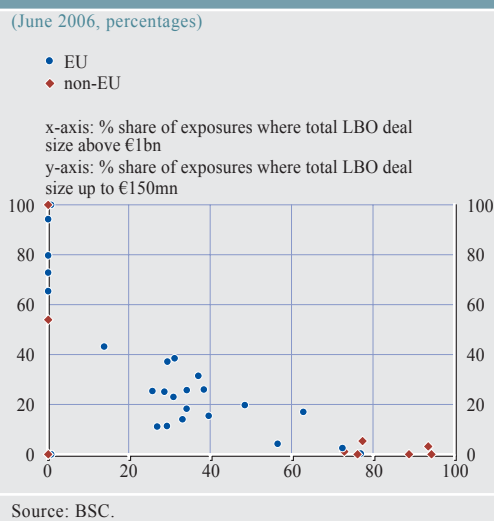
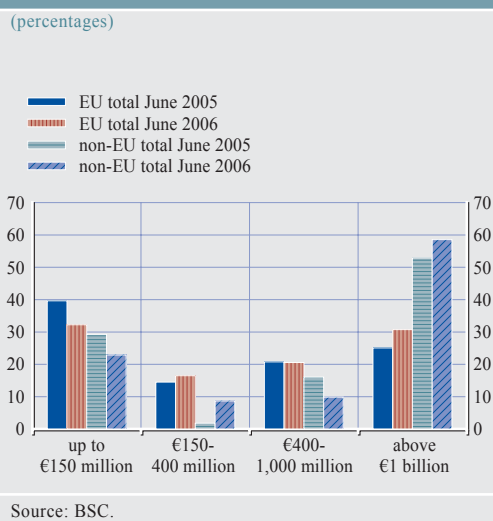


Chart 8 Net debt exposures by LBO transaction size: average changes over time



holdings related to transactions of less than €150 million as of June 2006.

Concerning the trend, there appeared to be a tendency for the proportion of large deals in the LBO market to increase further, in line with current market commentary, and for a decline in the proportion of small deals. Indeed, between June 2005 and June 2006, surveyed banks' net debt exposures in large deals (in excess of €1 billion) increased by around 5%, while it decreased by almost 7% in LBO transactions below €150 million (see Chart 8). This chart displays a geographical split, with EU and non-EU banks net LBO debt exposures showing slightly different patterns, though they shared the same trends. Notably, the surveyed non-EU global banks active in the EU's LBO market through their UK affiliates (mostly closer to the capital turnover model) showed a particular focus on large transactions, with debt exposures to this market segment almost reaching 60% of the total LBO exposures in June 2006. This figure was just above 30% for the sample of EU banks for which this information was provided.

The bulk of surveyed banks' exposures to LBO transactions consisted of senior or secured

debt, indicating that banks tend to play a conservative role as financiers in the LBO market and hence tend to be less vulnerable to failures of private equity-owned firms. In 2006, subordinated debt represented on average 11% of senior debt for banks domiciled in the EU and 20% for non-EU banks' affiliates in the UK. While for all bank types, debt exposures to LBO transactions have generally increased from June 2005 to June 2006, growth was particularly significant for capital turnover banks for which the median stock of exposures to subordinated debt increased five times (see Chart S3 in the Annex). Interestingly, due to strong price competition among banks, confirmed by the results of the survey, and high demand for high-yield debt, there is evidence that spreads between senior and subordinated debt have narrowed recently¹⁶ possibly raising the question of whether risk, taken by banks in LBO transactions, is being appropriately priced.

Turning next to the composition of these debt tranches, while the largest share of senior debt consisted of tranche A (term loan A), a

¹⁶ See, for example, Standard and Poor's European Leveraged Buyout Review Q4 2006.

significant fraction of senior debt, was composed of bullet loans (term loan B and C) which are generally repaid in full at maturity and hence carry higher credit risk. The share of term loan B and C in senior debt was almost 45% on average for all reporting banks. The results of the survey are aligned with market views alleging that banks' exposures to bullet tranches have increased over the past few years. For the set of capital turnover banks, tranches B and C already well exceeded tranche A as a share of the total stock of debt-secured exposures. Banks also proved to be very much engaged in the provision of bridge financing in LBO transactions.

Concerning the composition of subordinated debt, no clear pattern appeared to emerge from the data besides the proliferation of different types of unsecured debt arranged. A slight predominance of mezzanine debt in banks' debt exposures as of June 2006 can be found, especially for banks closer to the capital turnover model, probably to be disposed of in the weeks following the transaction, as described in Chapter 2. Interestingly, a positive relationship between the share of subordinated debt and the size of the total LBO loan portfolio

seemed to exist for portfolio and balanced banks (see Chart 9). This could suggest that banks with the largest exposures to LBO transactions are also those with the largest holdings of unsecured debt, therefore taking higher risk. This reasoning does not hold for some capital turnover banks that showed a large share of subordinated debt while holding small LBO debt positions, since these banks could be in the middle of the syndication process ultimately aiming to retain low or zero exposure to LBO transactions.

HIGH AND RISING LEVERAGE LEVELS

Gearing levels were identified by banks as the element in LBO transactions subject to the strongest competitive pressures. Survey results showed that, in fact, between June 2005 and June 2006 gearing indicators tended to shift upwards for the sampled banks, confirming that leverage in transactions has been rising over recent years. Banks were asked to report both minimum and maximum ratios of total LBO debt/earnings before interest, tax, depreciation and amortisation (EBITDA), also called the leverage multiple, and transaction price/EBITDA or purchase price multiple (see Chart 10). The gearing information reflects minima and maxima levels of these multiples in deals to which banks were exposed to as of June 2005 and 2006. The first indicator is a measure for analysing a company's debt burden in relation to its profitability (relative to other companies in the same sector). The second indicator is a measure to compare the price of a transaction with other transactions in the same sector or of similar size. Given the generalist profile of many large private equity firms, and the large number of transactions, comparisons are increasingly done across sectors, i.e. irrespective of the target firms' industrial sectors. The chart shows that the median value of the maximum debt-to-EBITDA ratios increased across the board between the two years and for all bank models. Interestingly, the distribution of maximum leverage multiples reported by capital turnover banks was the more conservative. Overall, median values for June 2006 were just below 8 but a significant

Chart 9 Banks' share of subordinated debt and total LBO exposures

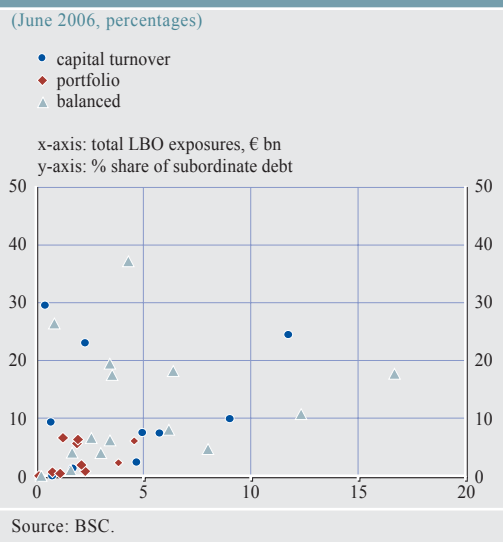
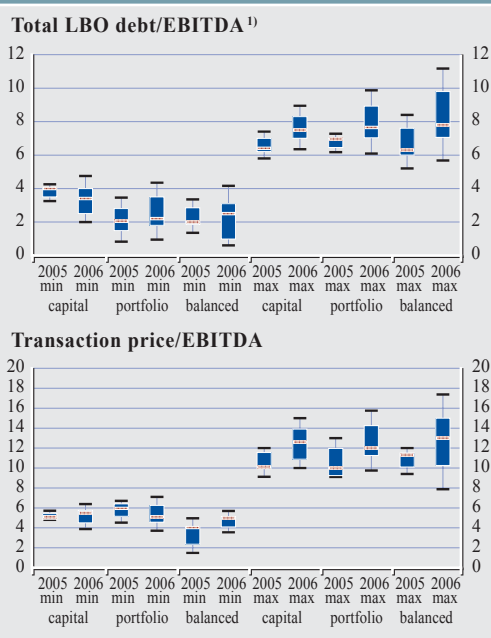


Chart 10 Gearing levels by business model: changes over time of minimum and maximum levels



Source: BSC.
 1) Total LBO debt includes debt of the target company in addition to the various debt tranches of the holding structure; the transaction or purchase price refers to the whole deal, thus including the equity part and the various debt tranches; EBITDA in the denominator refers to the 12 months preceding June 2005 or 2006.

fraction of portfolio and balanced banks reported ratios in excess of it.

Also pointing at increasing levels of gearing are the increasing purchase price multiples of LBO debt exposures between 2005 and 2006. The median values of the maximum purchase price multiples have increased steadily for all banks, irrespective of the business model followed. In June 2006 the ratio stood in the 12-13 range, depending on banks' business models, while minimum values hovered around 5.

Both leverage and price multiples are aligned but not directly comparable with figures reported by market sources. S&P figures for the last quarter of 2006 refer to an average leverage multiple below 6 and a purchase price multiple just above 8 for European LBO transactions.¹⁷

Another measure of gearing is the interest coverage of exposures, namely the ratio of EBITDA over cash interest payments, which is an indicator of a company's ability to meet its short-term debt finance obligations. Survey results showed that for most banks the minimum ratio of EBITDA over cash interest payments decreased from June 2005 to June 2006.

High gearing levels and lower credit standards as a result of stiff competition among banks could have led to some decline in the quality of banks' LBO debt portfolios. However, this turned out not to be the case in 2006. The benign macroeconomic environment and the low corporate default rate were evidenced in the survey by the small share of the stock of LBO debt that was considered impaired as of June 2006. In fact, from the stock of exposures as of June 2006, impaired LBO debt represented less than 1.2% of the total stock of LBO debt for three-quarters of the responding banks.¹⁸ This finding should be interpreted with caution since, according to banks and market participants' views, covenants (if required at all)¹⁹, have been set very widely so that it is de facto difficult to consider a LBO credit impaired.

Another important feature of banks' LBO debt portfolios is the transaction purpose. A significant proportion of the reported transactions consisted of recapitalisations which tend to be financed mostly by bank loans and might be more prone to default as discussed in Chapter 2. For all surveyed banks at June 2006, the median share of recapitalisations in the total volume of LBO transactions was 15%, while the third quartile was just below 30%.²⁰

17 See Standard and Poor's European Leveraged Buyout Review Q4 2006.
 18 Only 24 out of the 41 surveyed banks answered this question. For a number of institutions though, levels of impairment hovered around 4%.
 19 Contacts with market participants confirmed that an increasing number of LBO transactions do not involve covenants, further limiting default triggers.
 20 This figure might understate the level of recapitalisations in the EU since recapitalisation operations are often understood as a different category of transaction (not involving change of control) and hence different from regular LBO transactions.

Surveyed banks were also asked to provide information on the relevance of secondary buyouts as a share of LBO transactions they had participated in. The number of secondary buyouts, under which a private equity firm sells the target firm to another private equity firm, have increased materially over the past few years and according to S&P represented 45% of the volume of LBO transactions in the EU. The popularity of secondary buyouts (and also tertiary and quaternary transactions) is to a great extent related to the increasing leverage offered by banks that allows private equity sponsors to make good returns simply by selling off a company that is then further leveraged up. Market commentary has been rather critical of secondary buyouts since in these transactions the question arises as to whether private equity firms are indeed able to develop the target firms further, thus creating value for their investors, or whether such transactions simply constitute financial gains for private equity partners by the recycling of assets.

Responses to the survey indicated a relatively low share of secondary buyouts when compared with the levels reported by S&P for European LBOs. On average, secondary buyouts represented 22% of the total value of LBO transactions for the banks providing this information. For 2006, S&P reports a share of secondary buyouts of 45% based on LBO volume in the EU.²¹

BANKS' INVESTMENT EXPOSURES APPEAR LIMITED

Banks' investment exposures comprise possible equity investments in LBO funds, and co-investments in the equity part of LBO transactions. Banks may invest in LBO funds managed by the bank itself (or its affiliate) or by an unconnected management firm. The main risk involved in these operations is the underperformance of the equity, which however is reliant on the competence of the individual equity sponsor rather than the banks. For this reason, banks need to constantly monitor their equity exposures as well as the performance of the equity sponsor. Some banks prefer to

conduct this type of operation with sponsors with whom they have an already well-established relationship as this may enhance the information flow and facilitate monitoring.

Survey results indicated that banks do not seem to be regular equity capital providers in LBO transactions. In fact, this type of equity exposure appeared to be far less relevant for banks than debt exposures and therefore less of a concern from the financial stability perspective. A significant number of surveyed banks reported no investment exposures, especially among the non-EU bank sample, of which only three out of 11 banks were equity capital providers with rather small amounts invested in LBO funds. Since these are affiliates of global banks, it cannot however be ruled out that banks have their own private equity arm (at the global level) that is not being taken into consideration by the reporting subsidiaries or branches in the UK. Total equity exposures of EU banks were close to €12 billion in June 2006, both in terms of paid-in and committed capital, contrasting with a figure of almost €100 billion for debt exposures. Equity-providing EU banks showed a clear preference for investing in single-manager LBO funds (as opposed to funds of LBO funds), of which slightly more than a half were managed by unrelated firms. The remaining amounts to be invested were either managed by the bank itself or an affiliated party. It was nevertheless remarkable that for a subset of equity-providing banks, the number of individual investments (to be monitored) tended to be rather high, and could approach or exceed one hundred in a few cases.

BANKS' INCOME EXPOSURES DEPEND ON BUSINESS MODEL

Banks' income exposures to LBO transactions amount to revenue dependence from LBO-related activities. The high fee and interest income available in these markets has encouraged both commercial and investment banks to expand their presence in the LBO market. A market slowdown could substantially

21 See S&P LCD European Leveraged Buyout Review 4Q 2006.

hit participating banks' income streams or, more importantly, generate losses, although it is questionable whether such income losses alone could be sufficient to raise financial stability concerns.

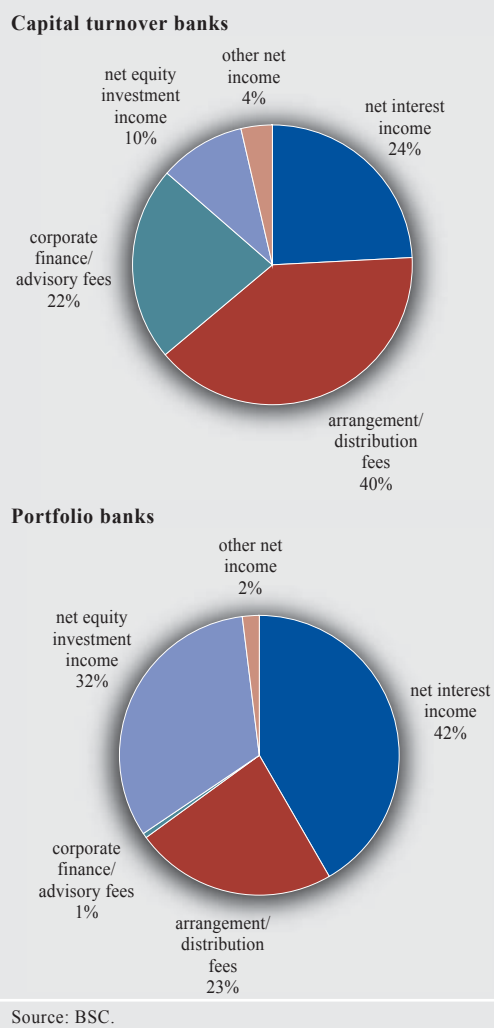
Often more important than interest income from LBO financing are revenues originating from deal arrangement, distribution fees from the syndication process, as well as corporate finance and advisory fees. In addition, equity-providing banks in LBO transactions should also receive income from investments.

According to the survey results, regarding the composition of income generated by LBO-related activities, net interest income was, as expected, more relevant to the portfolio model and balanced business model banks than to those closer to the capital turnover model, which tend to have lower credit exposures (see Charts 11 and S4 in the Annex). Net interest income represented on average 42% of LBO income for portfolio banks, followed by equity returns (32%), which reflects the importance of equity investments in LBO transactions among portfolio banks. Differences between business models become more obvious when these results are contrasted with the distribution of LBO-generated income by capital turnover banks. According to the survey replies, for this class of banks the bulk of the LBO-related income was derived from arrangement and distribution fees (on average 40%), as well as corporate finance and advisory fees (on average 22%). Indeed, a few banks derived more than 70% of LBO-related income from corporate finance and advisory fees as of June 2006.²² Interest income also proved to be important for some banks within this class which tend to combine features of the balanced model. Income from equity investment represented on average only 10% of the LBO income of the capital turnover banks for which this information was provided.

As a share of total income, income generated from LBO transactions represented a modest share for most EU banks. From the 16 EU banks

Chart 11 Structure of net income derived from LBO activities

(June 2006, percentages)



Source: BSC.

which provided this information, only a quarter reported LBO income as a proportion of total income in excess of 5%, though for one capital turnover bank this figure was slightly above 16% in June 2006. On the contrary, non-EU banks' affiliates in the UK revealed a stronger reliance on LBO income. In particular, for two banks (out of nine respondents) more than 50% of total revenue was obtained from LBO-related

²² This finding should be treated with caution since surveyed banks may have a different understanding of what is meant by LBO-derived income.

activities in June 2006, and for two other banks this figure was close to, or exceeded, 20%.

TOP FIVE LBO TRANSACTIONS

Reporting banks were also invited to provide more detailed information on particular features of their largest five deals. The quantitative information discussed in the following subsections is based on the banks' top five deals in the 12 months to June 2006, hence not necessarily characterising their whole LBO portfolio in June 2006. Each bank's top five deals were selected according to the size of the debt exposure (including committed capital) to an LBO transaction at the time the transaction (i.e. the documentation) was finalised. This means that banks' actual exposures, rather than the total size of the LBO in which the bank participated, were taken into account when selecting the five largest transactions.

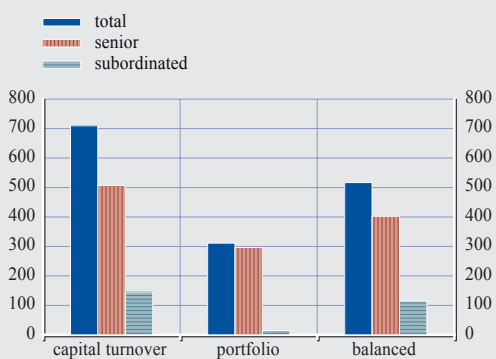
LBO DEAL SIZE AND STRUCTURE

Interestingly, for the EU banks' sample, the average size of the banks' initial debt exposures to top deals at the time the transaction was finalised nicely fits the banks' own classification with respect to the business model. Capital turnover banks proved to be those engaged in larger deals, (on average around €700 million), followed by the balanced banks (close to €500 million) and the portfolio banks (just above €300 million) typically associated with small and medium-sized transactions (see Chart 12). However, in all three groups, there was substantial variation across individual banks' exposures, with even the smallest of the individual top five exposures for some banks being substantially larger than the sum of the top five exposures for many banks.

Banks' decisions on the scale and type of debt finance they are willing to supply is to some extent a function of the business model pursued. Capital turnover banks typically intend to dispose of a significant share of the LBO exposures and hence tend to commit to higher exposures on day zero when the transaction is completed.

Chart 12 Top five deals – average initial debt exposures by business model

(June 2006, EUR millions)



Source: BSC.

Confirming the findings from the overall exposures section, the proportion of senior debt held by banks was significantly higher than subordinated debt: senior debt represented around 73% of debt exposures to top deals for capital turnover banks and somewhat more for portfolio (77%) and balanced banks (74%) (see Chart 13 and Chart S5 in the Annex). Within the senior debt exposures, capital turnover banks showed also a slightly higher share of non-amortising debt (term loan B and C debt). On a geographical basis, EU banks showed a slight preference for the least risky senior tranche A, while non-EU banks tended to hold more tranche B debt.

The proportion of subordinated debt was on average close to 20%, but reflected a wide dispersion across deals (e.g. approaching 60% for a number of deals). Given that these transactions are quite large in banks' balance sheets, due diligence should be extensive and banks may be more comfortable in being exposed to riskier types of debt. However, for many deals, especially those reported by EU balance and portfolio banks, which are more likely to keep exposures in their books, only senior debt was retained at the time the transaction was completed.

Regarding subordinated debt, capital turnover banks seemed to prefer holding high-yield

bonds (the closest to senior debt), which accounted on average for 8% of total debt. Bridge loans – interim financing covering the time lag between financial commitment and issuance of a high-yield bond – also represented a significant fraction of banks’ LBO exposures (around 10%).

Based on the information gathered on the banks’ top LBO transactions, counting more than 130 deals, it could be argued that larger shares in subordinated debt exposures were associated with larger LBO transactions. Similarly, there seemed to be a negative relationship between the share of tranche A in senior debt and the size of LBO transactions, indicating that the larger deals may pose more credit risk to banks (see Charts S6 and S7 in the Annex).

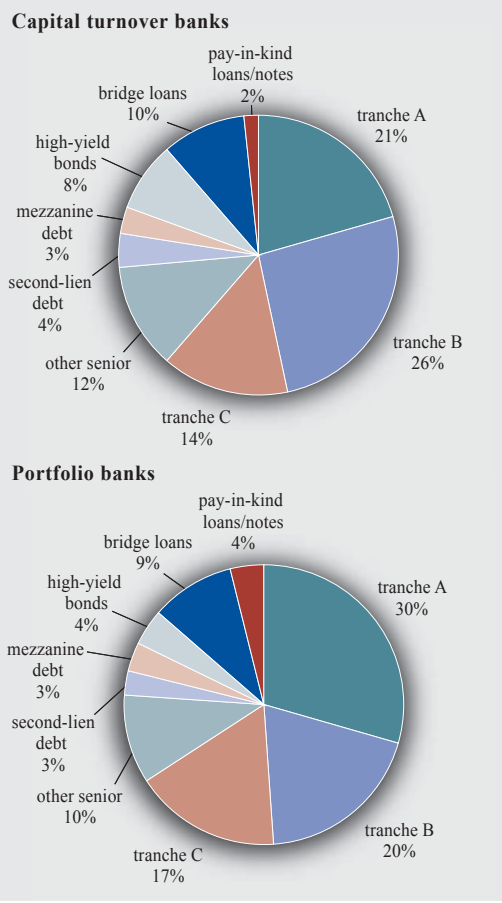
The equity component of transactions, at around 20% of the capital structure, proved to be rather small in historical terms and also helps to explain the high leverage of LBO deals.

PROMINENCE OF INSTITUTIONAL INVESTORS AMONG LBO INVESTORS

Despite the growing participation of institutional investors in the LBO industry, data on banks’ top deals have confirmed that banks are still very important debt investors in the EU. In fact, on average, banks accounted for almost 50% of senior debt providers and close to 25% of subordinated debt providers at the time the banks’ top five transactions were finalised (see Chart 14). CDOs, hedge funds and CLOs also took on a significant fraction of debt, mostly in transactions reported by capital turnover banks that are typically of a larger size. In particular, hedge funds and CLOs seemed to be important investors in subordinated tranches of deals involving the affiliates of non-EU banks operating in the London market, while CDOs’ participation was more visible in deals reported by EU banks. A significant fraction of debt holders at the time transactions were completed appeared to be unknown to the responding banks.

Chart 13 Debt composition of top five deals by business model

(June 2006, percentages)



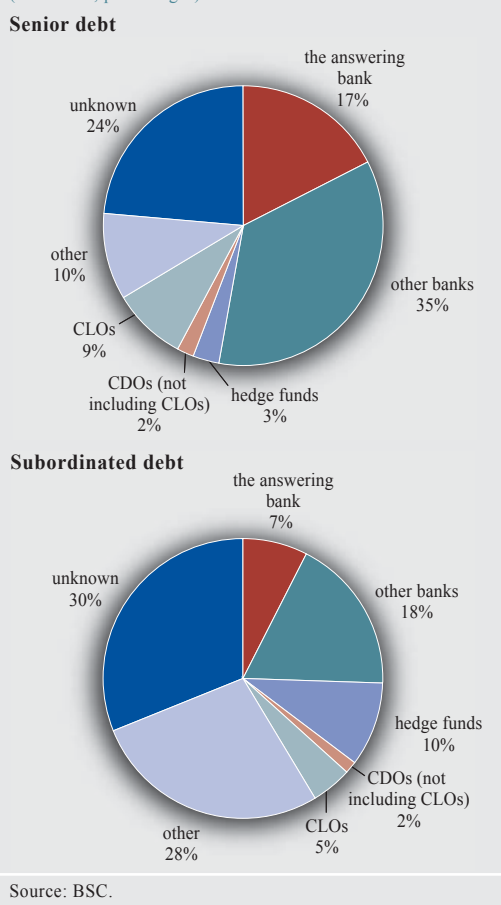
Source: BSC.

Turning to equity investors, information from the banks’ top transactions showed that large LBO transactions were not always associated with a large number of equity investors (never exceeding five). In addition, almost 40% of the reported transactions involved the participation of a single equity investor.

The banks’ replies were consistent in that their top five deals were generally part of a syndication programme prior to the finalisation of the deal. This may reflect the reason behind the fact that large deals have a relatively higher proportion of subordinated debt, as suggested by Chart S7 in the Annex and Chart 9. Being part of a syndication programme, banks are

Chart 14 Debt investors in top five transactions

(June 2006, percentages)



more willing to commit funds to riskier debt, as this type of debt is generally the one which is disposed of by the capital turnover banks. For all non-EU top deals and around 80% of EU top deals, the reporting bank was part of a syndicate from the outset, either at the request of the fund manager or of another syndicate member. For EU banks, where the portfolio and balanced models prevail, in 20% of the top transactions reported the bank was the only lender or joined a syndicate at a later stage (after the finalisation of the deal).

DISTRIBUTION OF DEBT

The primary risk management tool applied by banks to reduce their exposures to lending to LBO activity is the distribution of credit risk

among other banks and more broadly in the financial system via securitisation and the secondary loan and credit derivatives markets.

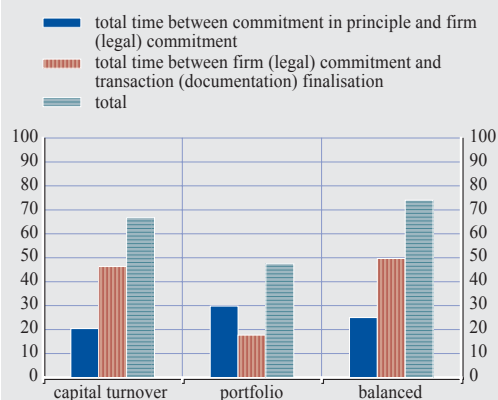
The banks' risk characteristics differ according to the role they have in the distribution process. Due to the time lag between the final commitment to the deal and the ending of the syndication process, arrangers of syndications are exposed to underwriting risk until the syndication is settled, while banks that participate in the syndication on a sub-underwriting level are exposed to the risk that they may not be able to distribute down exposures to a desired level on the secondary market. To partly mitigate the underwriting risks it is not uncommon for the LBO sponsors to invite several banks at an early stage to provide the leveraged financing for a specific deal, in which case the pre-syndication exposures will already be a fraction of the total value of the prospective deal. Although still important, transaction distribution is then less crucial than it would otherwise be in reducing the individual banks' credit risk exposures.

The LBO business model adopted by the bank is an important determinant of the loan exposure distribution. Banks that follow the portfolio model take advantage of the interest income from the loan exposures and tend to keep larger shares on their balance sheets. They also frequently buy into other syndicates if they do not consider their own deal portfolios to be sufficiently diversified. This does not, of course, mean that portfolio banks would not resort to extensive use of credit derivatives to hedge their credit risk exposures. For banks following the capital turnover model, deal distribution is crucial as their funding bases may not support long-term deal exposures.

Three points in time are relevant in assessing the actual risk exposure of banks underwriting LBO transactions, and these are: commitment in principle, legal agreement and full documentation (or finalisation) date. The process starts when a bank commits "in principle" to provide the finance, and should the bank step back from this

Chart 15 Top five deals: execution timeframes

(June 2006, number of days)



Source BSC.

commitment its reputation might be damaged. However, there is no legal obligation to participate in the transaction. The next step is the firm legal agreement after which a bank is legally required to provide the finance. The latter date refers to the point at which the transaction is finalised (documentation) and the cash transfer occurs. Syndication can only begin once the transaction is finalised.

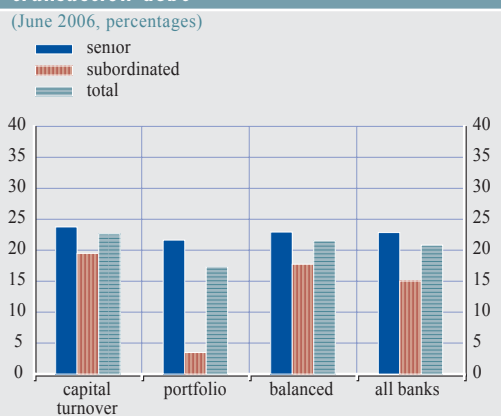
The execution timeframe between commitment to the deal in principle and completion of the full documentation is important. Indeed, the greatest risk for banks occurs between the date of commitment to provide the leveraged finance and the date the transaction takes place, as typically distribution can only start after the formal transaction completion date. Any disturbances to the market at this time could result in difficulties in passing on the credit risk. Survey results showed rather substantial variations in the execution timeframes for banks' top five deals, with the range varying between less than a week and two months from commitment in principle to the legal agreement, and between a week and four months from the legal agreement to the completion of the full documentation. It could be expected that banks purporting to follow the capital turnover model would be keen to complete the documentation particularly fast. However, somewhat

surprisingly, execution timeframes for this type of bank were only slightly more efficient than those for balanced banks, being the portfolio category which was the fastest to complete transactions (see Chart 15). Once more, this outcome draws attention to possible inconsistencies related to the banks' own classification according to business models followed.

The surveyed banks retained on average around 20% of the whole debt arranged in the five largest transactions they participated in at the time these transactions were finalised (see Chart 16). Capital turnover and balanced banks started off holding a significant part of the subordinated debt arranged in the transaction (just under 20% of the whole LBO debt), almost as large as senior debt exposures, possibly envisaging its distribution via syndication in the following weeks. Most of debt exposures of portfolio banks consisted of senior debt as subordinated debt holdings represented less than 4% of the whole debt in these banks' top five transactions.

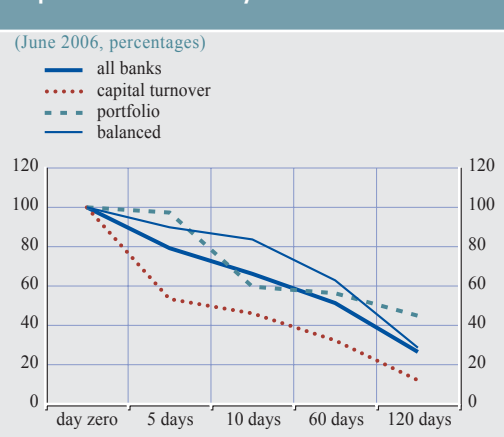
Once the documentation is completed there is quite some variation in the speed various banks actually distribute down their exposures. This mostly reflects the different business models the banks reported themselves following (although in some cases the responses seemed somewhat inconsistent with the reported business model). While portfolio banks on average distributed down exposures to around 50% of their original deal within 120 days, capital turnover banks, on average, distributed LBO debt down to slightly more than 10% with some institutions aiming at near-zero exposures (see Chart 17). Capital turnover banks also proved to be able to distribute almost the half of debt exposures quite rapidly, on average. On a geographical basis, surveyed non-EU banks proved to be more efficient in terms of the speed at which debt is distributed, likely due to the predominance of the capital turnover business model.

Chart 16 Top five deals: initial debt exposure as a share of whole LBO transaction debt



Source: BSC.

Chart 17 Top five deals: reduction in exposures overtime by business model



Source: BSC.

By breaking down the distribution of exposures by type of debt (see Charts S8 and S9 in the Annex), it can be seen that especially in the case of subordinated debt, capital turnover banks distributed on average around 50% of their exposures within five days of finalising a transaction, aiming at slightly more than 30% of debt exposures within 60 days. Portfolio and balanced banks tended to retain exposures over time, reducing it more gradually, still having more than 50% of exposures on their books 60 days after the transaction execution. In particular, portfolio banks tended to keep most of subordinated debt on their books. Given their limited net exposures to subordinated debt in absolute terms, portfolio banks are possibly less concerned about reducing credit risk exposures and more attracted by interest income deriving from high-yield bonds and pay-in-kind notes.

3.2 RISK MANAGEMENT AND MONITORING

The survey also included a set of qualitative questions on banks' risk management and monitoring of their exposures to LBO deals. The responses showed that banks' due diligence and credit analysis of LBO deals is generally extensive. The main focus lies on determining the target companies' ability to generate cash flows, to service debt and on assessing the

banks' ability to syndicate and distribute LBO exposures down to comfortable levels. The leverage is a relevant, but in itself insufficient, indicator in the credit analysis, whose appropriateness depends largely on other factors. The survey also revealed that some banks may overestimate the role of collateralisation, and that reliance on covenants alone to monitor the credit quality of the deals is generally not sufficient.

DUE DILIGENCE, CREDIT ANALYSIS AND THE ROLE OF SYNDICATION

Due diligence, credit analysis and the ability to syndicate and distribute credit risk are key elements in banks' assessments of the risks associated with LBO lending. Most banks involved in the survey perceive LBO financing to be riskier than other types of corporate lending, due to the higher leverage involved. The credit analysis of LBO deals tends therefore to be at least as extensive as in the case of the banks' other corporate lending decisions. Some banks explicitly require that LBO deals are subject to a higher degree of credit analysis and due diligence than other lending. Banks that arrange syndications typically carry out their own due diligence. For banks participating in syndications the picture is more mixed: some banks rely on internal due diligence, while others rely to a greater extent on external due

diligence. However, all participating banks carry out their own credit analysis, motivated by the fact that this aspect of risk management is considered too important to be left to others.

The primary aim of the credit analysis is to determine the level of debt the target company can cope with in a downward scenario. Particularly relevant in this respect is the target company's ability to generate cash flows to service the debt under less benign economic conditions. In determining this, most banks make use of both qualitative and quantitative criteria. The qualitative criteria, which allow banks to analyse the fundamentals of the businesses and the stability of the cash flow of the target companies, include an assessment of market developments, the quality of the firm's management, the business plan, and the predictability of future cash flows.

Some banks have emphasised that the qualitative criteria are considered to be more essential in analysing the risk characteristics of LBO deals than quantitative criteria. These latter criteria consist of analyses of financial ratios that primarily reflect leverage (mostly captured by net debt-to-EBITDA) and the debt burden placed on the company (mostly indicated by interest cover, debt service cover and cash flow-related ratios). Hence, the quantitative criteria, particularly the leverage ratios, can only be considered as relevant but insufficient indicators when assessing the degree of credit risk.

Overall, when EU banks assess the risks associated with prospective LBO deals, the various qualitative and quantitative criteria rely to a large extent on backward-looking measures, based on financial accounts and debt sustainability analysis. Information from the secondary markets where LBO debt instruments are traded is rarely used. This is particularly striking because US banks typically use market-based information to complement their due diligence processes to assess the risks in LBO debt. Although both approaches have their pros and cons, the primary focus of EU banks on

backward-looking measures raises the question of the extent to which their credit analysis may suffer from a lack of adjustment to risk. To that end, EU banks' credit analysis could be improved by taking into account more market-based risk criteria.

Another important aim of the credit analysis is to assess banks' ability to syndicate and distribute risk exposures down to comfortable levels. Most banks involved in the survey have emphasised that LBO transactions expose them to high concentrations of credit risk to one counterpart. Therefore, as shown in Chart 17 above, the vast majority of banks aim to reduce their exposure towards single names to a preferred level by distributing debt to other banks and to investors in the secondary market. Indeed, most banks involved in the survey perceive the underwriting risk – i.e. the concentration risk that arises within the execution timeframe – as being a major risk in providing LBO financing. Therefore, the ability to mitigate underwriting risk also forms an essential part in most banks' decision-making process. Therefore, the possibilities for distributing risk are assessed and the residual concentration risk is taken into account by banks before they make the final commitment to a deal.

The ability to pass on acquired debt exposures depends largely on the prevailing sentiment in the market for credit risk, which can worsen quickly if investors' required compensation for credit risk increases or the liquidity situation in the marketplace deteriorates. Gross exposures to LBOs, which can largely exceed net exposures, are arguably more relevant from a risk perspective, underlining the case that the aforementioned time-lags are kept to a minimum.

Banks can use additional instruments to reduce risks associated with LBO lending. Up to the documentation and syndication phase, market-flex clauses provide an opportunity for arrangers to reduce the underwriting risk by allowing them to make subsequent adjustments of the

credit terms to current market conditions. After the syndication is completed, MAC clauses still allow for modifications to pricing or structure of the debt depending on market conditions. Credit derivatives provide further opportunities to mitigate banks' exposure. However, the extent to which banks use these financial instruments to reduce exposures varies considerably. While credit derivatives are barely used in some EU countries, large players in particular assert that their presence in the LBO market is entirely conditional on access to hedging by credit derivatives.

LIMITS EXPOSURE MEASUREMENT AND COLLATERALISATION

Limit setting varies from bank to bank, depending on the role they play in the lending process and the kind of business model they pursue, and it is therefore hard to distinguish a uniform treatment of explicit limits by banks. As an arranger, the bank may have to retain some part of the lending on its balance sheet in order to mitigate agency problems. Being a single lender and/or conducting relationship-based lending generally results in higher exposures. Some banks set underwriting limits on a case-by-case basis largely depending on the credit analysis and due diligence processes discussed above. The more sophisticated banks also attach a credit rating to each deal, which can be obtained from internal credit risk models. Other banks use explicit limits for total LBO credit exposures, sometimes in combination with limits for individual transactions.

Finally, there are banks, particularly those with less experience in LBOs, which do not use any formal limits at all. Notwithstanding the absence of a standardised limit policy regarding LBO debt across EU banks, it seems fair to say that most banks work with deal-specific final holding limits. Such limits set out the maximum net exposure up to which a bank is willing to bear credit risk and typically only take into account the LBO debt the banks retain after syndicating transactions. The holding limits differ across banks and deals, but in most cases

the target holding level is set at a maximum 30% of the total value of the debt. The banks use the organisation already in place for assessing other larger credits to keep their LBO credit exposures at desired levels. However, the majority of banks lack an explicit capital allocation for LBO credits. Rather, banks assess the opportunities to syndicate and distribute credit risk before they arrange a deal.

In general, as was shown above, banks' post-distribution exposures almost entirely consist of senior debt tranches; this is an important finding from the risk perspective as it indicates that the banking sector is not likely to be directly exposed to large losses, should the conditions in the EU's LBO market suddenly deteriorate.

The valuation of collateral is generally a part of bank's credit analysis process. Banks attempt to achieve as perfect a security structure as possible, but recognise that there are restrictions on acceptable collateral in LBO transactions. Such restrictions include the distinct legal environments in different geographic markets, the structure of the deal and the quality and negotiating power of the LBO fund counterparty. A stronger debtor negotiating position may force the banks to accept weaker covenants and lower-quality collateral, which reduce the recovery ratios in distressed situations. However, since banks to a large extent pass on the more junior debt tranches to other investor categories, this may primarily be an issue for investors outside the banking sector.

It is important to stress that most banks consider collateral values to be of secondary importance to the target company's ability to generate cash flows to repay its debt. This is often due to the difficulty banks have in setting a reliable value on the target company's assets. The collateral for the senior debt tranches generally consists of the target company's securities, the market value of which can be volatile and uncertain. Therefore, banks typically require a big haircut to collateral values to ensure sufficient cover. In this respect it is revealing that most banks –

even though their lending to LBO deals is secured in principle – treat their LBO exposures as unsecured by attaching zero weight to the collateral they hold. However, the finding in the survey that some EU banks do not apply equally conservative treatment to collateral could raise some prudential concerns.

ONGOING MONITORING

Monitoring is carried out permanently by all banks with a slightly different focus and level of detail on a monthly, quarterly, semi-annual and annual basis. Senior management reviews at least once a year the outstanding LBO deals and most banks inform their senior management in due course of (potential) problems arising from a particular LBO exposure.

Typically, ongoing monitoring takes place on an individual basis, usually on a monthly or quarterly basis; only a minority of banks report that they also monitor developments from a portfolio point of view. The lack of monitoring at the LBO portfolio level is often motivated by the specific and often deviating risk characteristics of individual LBO deals, which would make a portfolio approach difficult. Although this is to a large extent true, monitoring on a case-by-case basis only may result in the build-up of concentration risk within the portfolio, without bank risk managers knowing about it. Hence, from a risk perspective it is advisable that banks not only monitor their LBO exposures individually, but also at the portfolio level so as to be able to identify (potential) leverage, economic sector and credit rating concentrations.

To facilitate the monitoring process, banks receive in general a pretty extensive flow of information. The normal reporting requirements for target firms are in the form of monthly management account, profit and loss reports, cash flows and management commentary, internal audit accounts and year-end reports and accounts. Generally, the level of information is all-embracing, and banks expressed no concerns about lack of transparency.

Typically, banks set covenants for the quantitative ratios discussed above and monitor these closely on a timely basis. Banks review the financial performance (returns, cash flow generation and financial ratios) of the business against the original covenants together with a review of the cash flow models and ratings. Banks will react to large gaps between current performance and original projections or a covenant breach in most cases by introducing a work team. However, in case banks suspect adverse credit deterioration, exposures are increasingly being reduced via secondary markets for debt investments. Currently, such sales of “problem exposures” encounter few difficulties because of the high market liquidity and enormous demand for LBO debt instruments. Although this is beneficial for banks’ risk management, it may mask the build-up of problems in the LBO market which could ultimately be revealed if market liquidity was sharply reduced.

Although covenants provide some protection, the reliance on covenants alone to provide an early warning of an adverse credit migration is generally far from sufficient. To this end, banks’ own internal credit review processes are critical. Generally, stress tests or scenario analyses are part of the reviewing process and are typically done on a case-by-case basis. Building on cash flow projections in the base case scenario, stress scenarios are prepared to examine how far covenants will be breached and to reflect the size of refinancing and default risks. A minority of the banks report that they do not carry out stress tests. In addition, some EU banks reply that they use credit risk models to evaluate the portfolio companies’ performances and to predict future covenants compliances/breaches. According to these banks, such models operate as early warning indicators and they provide banks with the flexibility to pro-actively monitor and manage their LBO exposures.

Strikingly, EU banks hardly use market information even for ongoing monitoring purposes, though such information may provide

forward-looking insights into the performance and credit quality of LBOs. To a large extent, this can be explained by the fact that in Europe the markets for LBO debt instruments have – until recently – been lacking in comparison with the US. Monitoring by banks could be facilitated and improved if LBO debt instruments were actively traded on liquid markets.²³

3.3 OUTLOOK FOR THE EU'S LBO MARKET ACCORDING TO THE SURVEYED BANKS

This section provides a summary of the opinions on the outlook for the EU market as expressed by the banks who participated in the BSC survey.

EXPECTATIONS FOR MARKET TRENDS

According to the survey results, almost every bank expected deal sizes to increase further. In banks' view, this trend was likely to be underpinned especially by big public-to-private (P2P) transactions, followed by secondary buyouts and recapitalisations. Some banks indicated that while, on the one hand, they expected only few large private equity funds to be involved in these large transactions, smaller but (sectoral or regionally) specialised funds could also benefit from their expertise and remain relevant players. In contrast, the mid-tier segment of the LBO sponsor industry was expected to undergo a phase of consolidation in the medium term.

Banks concurred in that European debt financing was strongly being driven by the expansion of institutional investors, including CDO and CLO managers, insurance companies, pension funds and hedge funds, with institutional investors accounting for approximately 50% of the debt part of new LBO deals. Most banks expected this share to grow further over the next few years.

While default rates continued to remain exceptionally low, there was the perception among banks that the market was beginning to distinguish between certain types of credit and

industry. In particular, the automotive supply industry, which has traditionally been a favourite target for LBO funds due to their long and stable contracts with car makers, was being avoided following several high-profile cases of credit quality downgrades. Regarding the outlook for covenant policy, banks seemed to have different views, as some foresaw a further dilution of covenants, whereas others predicted no major changes either in new covenant structures or the number of breaches of existing loan covenants.

Most of the responding banks admitted that a significant rise in interest rates would pose a major threat to the LBO market. While target companies often tend to hedge most of their interest rate risk, refinancing of secondary buyouts and arranging of new deals could be more severely affected. Regarding the possibility of an economic downturn, the outlook could be worse still. Almost half of the surveyed banks said that even existing deals were more likely to turn sour as first covenant breaches, and thereafter default rates, could be expected to rise significantly. This could be particularly the case for the LBO target firms in the more cyclical industries.

EXPECTATIONS FOR PRODUCT TRENDS

Most responding banks confirmed that the growing importance of institutional investors in the LBO market had led to an increase in the proportion of institutional debt tranches which can be held to maturity so as to minimise the transaction costs and efforts associated with finding replacement assets. Furthermore, such facilities come almost always with bullet-type repayment structures which are seen to considerably enhance flexibility in a prospective downturn – and thus partially compensate for higher leverage levels – as the borrower would

²³ Recently iTraxx released a high leverage index (LevX) covering the universe of European corporates with leveraged loan exposures traded in the single-name loan CDS market. This is an example of how the market for pricing LBO debt is developing in the EU and shows that it should be possible to improve the assessment and monitoring of LBO deals by using market information.

not have to confront debt repayment requirements when cash flows are tight. Payment-in-kind (PIK, notes that include the option to repay debt by cash or by issuance of a new note) and cash sweep agreements, as well as so-called “flex” and “portable” agreements, were expected to appear more frequently in debt structures, making transaction financing more flexible and fungible. Regarding the hedging by institutional investors of the credit risk that is assumed by the acquisition of leveraged debt tranches, banks pointed out that the leverage loan CDS (LCDS) market was one of the fastest growing market segments as of June 2006.

BANKS' OPINIONS ON FUTURE RISKS

In general, surveyed banks continued to be optimistic about further growth in the EU's LBO market, with only a few banks explicitly expressing concerns about an overheated and untested market or a forthcoming correction. Apart from the favourable economic cycle and low default rates, a key driver of the buoyant market conditions was seen to be the continuing abundant liquidity both in terms of equity funding and availability of cheap debt financing. The potential vulnerability of the LBO market due to its dependency on the resilience of the institutional investors' demand was somewhat downplayed against the background of structural trends which support the global demand for high-yielding and long-maturity products.

These broadly optimistic opinions were balanced by some less sanguine views regarding current market conditions. Concerns about high leverage and expensive deal prices were often mentioned in banks replies. Indeed, some banks pointed out that high leverage multiples were starting to pose a potential threat to the market, although only few banks explicitly expected more frequent covenant breaches or higher default rates in the future. The majority of banks indicated that they were aware of the growing risks but that these were still perceived as manageable, particularly for target companies demonstrating steady cash flows through the

economic cycle. Moreover, only a minority of banks expressed concern regarding aggressive leveraged recapitalisations, even if such inherent early repayments may reduce the sponsors' incentives to support the target companies. According to banks, such problems could be offset by the need by LBO funds to demonstrate a solid track record so as to attract investors and lenders for future deals.

One of the largest unknowns in surveyed-banks' views was the potential behaviour of investors and market participants in the event of a broad economic downturn or a crystallisation of a sudden triggering event, such as the failure of a syndication of a very large deal. In that context, some responding banks indicated that market participants could be relying excessively on the ongoing favourable market conditions.

4 ASSESSING RISKS TO FINANCIAL STABILITY

This survey and other recent related studies carried out by market observers and public authorities have identified a number of potential risks and vulnerabilities that could arise from banks' involvement in the private equity market, in particular their facilitation of leveraged buyout transactions. However, a general conclusion from the results reported in this survey is that although many of the risks identified could have a potential adverse impact on banks' profitability and future earnings performance, few of them are likely to be severe enough to pose a broader threat to financial stability.

This section discusses the various financial stability risks and vulnerabilities associated with LBO activity in the EU, grouping them broadly in two categories: risks to banks that could be more or less directly gauged from the responses to the survey, and risks that are more closely related to the general macrofinancial environment.

4.1 POTENTIAL FINANCIAL STABILITY RISKS FROM BANKS' EXPOSURES

In recent years, improvement in the financial positions of non-financial firms throughout the EU – against the backdrop of low interest rates, ample liquidity and consolidation of economic growth – has supported the expansion of M&A activity in the region. As pointed out in the responses to the survey, these developments have led to intensifying competition among investors and financing providers in the LBO market. In addition, the survey suggested a growth in fee-seeking behaviour among market participants. Although banks which are active in the EU market assert that careful credit analysis is consistently carried out in LBO transactions, it cannot be excluded that such pressures could encourage banks to compromise their due diligence and loosen their credit standards should the rapid growth in the market continue.

This survey identified the key risk for individual banks as being caught with a large exposure (for example, a bridge loan) when an LBO deal fails prior to distribution.²⁴ Failed syndication may leave the bank with very large and concentrated exposures to individual names that it was not intending to hold beyond the short run. In such cases the originating bank could become exposed to a potentially very large credit loss and, via expectations, broader market confidence could be hit. The role of failed syndications or prolonged syndication times as a key indicator of potential problems in the LBO market is further enhanced by the dilution of the role of loan covenants as early warning indicators. Indeed, the survey results suggest a growing tolerance for covenant breaches and a tendency towards fewer covenants being included at the outset in new deal contracts.

After a successful distribution of their LBO exposures (that can take place via syndications, derivatives, assignments and securitisation), any direct impact of a potential market downturn on banks' balance sheets and P&L accounts is

likely to remain moderate.²⁵ The exposures that are retained by banks are typically located at the high end of the debt seniority spectrum and banks' recovery rates following any credit events are therefore likely to be higher than for the more junior creditors.

It is also important to put the banks' LBO exposures into the correct context, as the survey revealed that the exposures are generally not large relative to banks' capital buffers. Moreover, the move to the Basel II capital regime will assign increasingly stringent capital requirements on higher risk-weighted loan exposures, such as those arising from lending to leveraged transactions. All in all, therefore, systemic risks originating from individual banks' LBO credit risk exposures are likely to remain muted at least insofar as the counterparties of the risk transfer process remain solvent.

Banks' exposures to LBO activity are, however, not limited to credit risk. The survey revealed that many banks are earning substantial income from the investment, fees and commissions derived from LBO-related activities.²⁶ The opportunity to access such revenues has attracted new entrants to the market and encouraged existing players to expand their activities. The growing reliance by some banks on fee and investment revenues from LBO financing suggests that any slowdown in the market could substantially hit these institutions'

²⁴ These concerns have recently accentuated further with the introduction of "equity bridges" in some very large LBO transactions in the US market. When providing an equity bridge, a bank (or a group of banks) obtains a much lower position in the seniority structure than in the case of a bridge loan, further increasing the risks to the bank from an early failure of the LBO project.

²⁵ This conclusion is, of course, conditional on the extent to which effective risk transfer has actually taken place as securitisation typically does not involve a transfer of all the risk from banks' balance sheets.

²⁶ Standard and Poor's estimate that in the US bank fees from leveraged finance activity grew by nearly 90% from 2000-2005 while in the same period corporate and investment banking fees grew by 12%. According to S&P, these figures are likely to grossly underestimate the true fees, however. For every dollar of leverage finance fees they earn from LBO transactions, banks could earn an additional 40-80 cents from related product sales.

income streams. However, given the current degree of development of this activity in the EU it is unlikely that an adverse income scenario would be sufficient to generate systemic effects by itself, although it is possible that several risks could crystallise at the same time.

More aggressive deal financing structures could also be putting pressure on the future capacity of the target companies to repay the debt. Indeed, as highlighted in this survey, several banks report that the interest coverage of their LBO debt exposures is already rather low. Therefore, insofar as the debt is in variable interest rates, even a modest rise in interest rates could make debt servicing a challenge given the current cash-flow performance of lower-rated target companies in particular.

Finally, although not directly derived from the survey, should the LBO cycle deteriorate in the foreseeable future, the outlook for distressed loan workout processes could be quite different for banks compared with previous LBO boom episodes. The involvement of a large number of debt investors who may be subject to different objectives and constraints may prevent the orderly workout processes typically associated with banks' relationship lending. Operational issues such as complex non-standard contractual terms and processes may complicate the assessment by investors of their positions in the seniority structure, and opaque risk transfer and risk management processes may obscure counterparties' true net debt exposures. The growing cross-border dimension of the EU market adds further complexities as several jurisdictions with different bankruptcy legislations may be involved in any given debt workout process.

All these issues are likely to expose banks to new and unpredictable legal and reputational risks and it cannot be excluded that a clustering of legal disputes could cause temporary paralysis in the LBO market with potential spill-over effects to other markets, such as the derivatives markets. To mitigate such risks,

even when the probability of them crystallising is low, it is important that banks take frequent reviews of their exposure concentrations and borrowers' fundamental creditworthiness.

4.2 POTENTIAL FINANCIAL STABILITY ISSUES ORIGINATING FROM THE MACROFINANCIAL ENVIRONMENT

From the point of view of the LBO market, the current macrofinancial environment is almost "as good as it can get". Despite the fact that short-term interest rates have been increased in almost all major economic areas, costs of borrowing remain moderate and overall financing conditions are favourable. Until recently, volatility in practically all financial asset classes remained at a historically low level, which supports both risk taking and competitive pricing of assets. Corporate sector defaults remain exceptionally rare and recovery rates are high, encouraging investment in lower-rated companies. Finally, the increasing presence of new investor categories and improvements in tools and techniques for risk sharing and risk management, as well as financial innovations in the debt capital markets have substantially increased liquidity in the market.

All these factors together have contributed to the continuing compression of spreads in the corporate loan market while, at the same time, the pursuit of primary LBO deal transactions has moved down the corporate credit quality spectrum. If continued, such developments could contribute to deal pricing and terms for recapitalisations to become increasingly contingent upon expectations that the current favourable market conditions will prevail beyond the foreseeable future.

Interestingly, some market participants tend to admit that some of the LBO deals currently being financed are characterised by capital structures that are known to be unsustainable in the long term, on the assumption that the deals can be refinanced on more favourable terms in the near future. Even if such optimistic

expectations would be validated *ex post*, increasing numbers of refinanced transactions could pose risks for the debt holders if the additional funds are excessively used in shareholders' interests rather than invested in the company.

Even if the current outlook for economic growth in the EU is rather robust, the gradually tightening financing conditions in almost all Member States are likely to start exerting pressure on those LBO deals that are particularly sensitive to interest rate risk and the various loan products that are sourced from such deals. A specific risk associated with all but the most senior parts of the LBO debt financing structures is the possibility that the debt repayments – which are due when the bullet-type back-ended amortization structures mature – will coincide with a macrofinancial environment that is characterised by slowing economic growth or higher interest rates. In such circumstances, a cluster of defaults could take place, the impact of which may spread within the financial system via its effect on credit derivatives markets and possible failures of leveraged loan investors whose funding bases are not sufficiently stable to withstand losses that extend beyond the short term.

Against this background, it cannot be excluded that the increasing prevalence of *covenant-lite*, back-ended amortisation schemes with fixed interest rates could partly have contributed to the postponement of the turn in the credit cycle – insofar as sub-investment grade default rates have remained exceptionally low – by allowing companies with weak balance sheets and insecure future cash flows to avoid loan repayments in the early years after the buyout.²⁷ Although banks tend to place their retained LBO exposures to trading books where they are marked-to-market and therefore frequently monitored, from the financial stability perspective it is still important that the debt structures of large LBO deals are, at the outset, subjected to rigorous stress-testing that also involves scenarios that extend up to the horizons that match the maturity structures of the bullet

loans issued. In the absence of such practices, investors in the LBO debt could easily become buoyed up by a sense of complacency regarding the true risks involved in their investments.

The emergence of the secondary market for both LBO deals and loans is an important development that increases the exit options for LBO investors, adds to the liquidity in the market and also provides forward-looking indicators regarding the sentiment in the LBO marketplace. At the same time, however, the transfer of LBO loan tranches to third parties has blurred the identity of the end-holders of credit risk. The rapid growth in the market for credit derivatives in particular, while successfully contributing to a distribution of risks across markets and across financial and non-financial agents, raises the question regarding the robustness of the (mostly OTC-based) market for credit risk transfer that remains untested in more challenging credit and liquidity conditions. Investors, creditors and debtors who are active participants in LBO transactions and who hedge their positions extensively by using credit derivatives products should therefore be fully aware of the risks they may have assumed – such as risks of disruptions in the credit risk transfer market infrastructure or hidden counterparty risks. Even banks which tend to distribute all their LBO loan exposures to third parties may face counterparty risks due to their exposures to the same parties via other business lines, such as prime brokerage and advisory services.

A related risk that arises from the combination of the introduction of complex leveraged loan products and the activity of lightly regulated institutions in the marketplace is that the overall exposure of some investors to riskier parts of the LBO debt structures could be considerably higher than could be inferred from their balance sheets. For example, some leveraged investors, such as specialised hedge funds, may have exposures to deeply subordinated leveraged

²⁷ Market participants suggest that historically the peak of the default rates among single-B and CCC-rated corporates has tended to occur three years after takeover or recapitalisation.

loans by their positions in leveraged instruments such as junior CLO tranches or LCDs. To account for such “embedded leverage”, frequent review of counterparty exposures is a crucial task particularly for those banks that distribute out large shares of their LBO debt exposures. Such ongoing monitoring is important even if retained LBO-related exposures are placed in the trading books where they are subject to marking-to-market.

5 CONCLUSIONS

The BSC survey of large banks’ exposures to private equity-sponsored leveraged buyouts in the EU has found that while not being the originators the majority of the deals, banks play a central role in the LBO market through their various lines of business. Among the functions banks perform, financing and debt syndication have been key to the LBO market development over the past few years. Moreover, their ability to provide cheap and flexible financing, as well as to distribute and spread the credit risk linked to LBO operations widely throughout the financial system, has provided an unprecedented boost to the private equity market, against a background of very favourable economic conditions.

Concerning banks’ direct credit exposures to LBO market activities, the survey results do not support the idea that these could pose systemic risks. While keeping in mind that the banks surveyed are large players for the most part, the relatively low proportion of LBO-linked assets compared with total balance sheet sizes (or even own funds) seems to show that the potential for a severe market downturn to have a material impact on their financial accounts is still rather limited. This is not very surprising since, like other credit exposures, LBO exposures are subject to appropriate regulation at the EU level. In particular, capital charges associated with LBO exposures are intended to act as a buffer if losses are incurred, and risk concentration on single-name

corporates is also restrained by the application of regulations on large exposures.

Working in conjunction with a rigorous screening of credit risk by the banks themselves, the regulatory environment prevalent in the EU has thus contributed to mitigating the risks created by the buoyancy of the LBO market.

Regarding sources of risk for banks’ income, even though there are some risks related to the possibility of a LBO market downturn, it is unlikely that the financial strength and resilience of the banking sector would be materially affected.

While the materialisation of systemic risks for the banking sector from LBO activities appears remote at the EU level, the BSC survey identifies some concerns regarding recent trends in the LBO market which may warrant further monitoring by supervisory authorities.

Looking at the survey’s results, the following main conclusions emerge.

- The amount of LBO debt held by large banks increased materially the year to June 2006 as did the size of LBO transactions in which banks were involved. This rise was possibly facilitated by the move by many banks towards the “capital turnover” business model, in which banks aim to shed most of their LBO-related credit risk through debt distribution and credit risk transfer once transactions are finalised.
- The credit risk exposure linked with LBO deals remaining in the banks’ balance sheets is mechanically more sensitive to deterioration in the economic cycle than traditional credit risk, due to the leveraged nature of LBO deals. With a re-leveraging process underway in the EU corporate sector, the negative impact of adverse disturbances for LBO credit exposures could prove to be more significant than for other segments of the banks’ loan portfolio. Higher default rates on LBO companies or

the occurrence of difficult workouts in case of breach of covenants could also weigh on the market's recent dynamism.

- The lengthening of syndication times and rise of underwriting risks on single-name exposures are also a potential source of risk for banks if the LBO market were to experience a sharp and unexpected downturn. While banks have developed efficient pre-syndication procedures in order to shorten the time of exposure, the larger size of the new deals and the complex nature of the most exotic debt packages often make it more time-consuming to dispose of all the debt to potential buyers. The conditions under which bridge finance is made available also potentially requires scrutiny.
- Intense competitive pressure to win new deals, compressed margins and acceptance of weaker covenant clauses as a result of optimistic expectations on future economic outcomes could make the LBO market both more risky and less profitable for banks in the future.

These findings argue for the use by banks of rigorous risk management techniques and large-scale application of stress-testing. Such stress tests should include scenarios of adverse interest rate movements (due to future refinancing risks) and they should extend to horizons that are consistent with the maturity of the non-amortising loan structures. Appropriate stress-testing should be applied both during deal selection and post-closing monitoring periods. There is no margin for complacency on this matter, as it is unlikely that the various risks identified would, if they were to crystallise, surface individually or isolated from one another.

Due to the large amount of funds funnelled to the LBO market over the past few years, the potential for excessive asset inflation and risk mispricing is evidently stronger. Most of the large banks interviewed during the survey are

aware of the risks and have emphasised that best practices in terms of risk management are already in use. Nevertheless, the current state of the market implies that internal commercial objectives set by banks for LBO activities should remain realistic in order to avoid creating incentives to enter the most aggressive transactions, often involving a softening of credit standards.

Besides issues associated with micro risk management at the level of individual banks, other identifiable sources of risk can be linked to the possibility of adverse market moves.

- The growing interrelationships between financial markets (debt, equity, derivatives, etc) create new channels of contagion through which liquidity problems may propagate. Indeed, the ability of banks to remain active in the LBO market (i.e. distributing a large share of credit risk to other players) relies heavily on the resilience of institutional investors' demand as well as on the effective functioning of the credit risk transfer markets.
- While the growing importance of the institutional investors as debt buyers has, up to now, permitted the LBO market to grow steadily by spreading risk more widely among the various entities in the financial system, there are risks that this source of liquidity could prove fickle. For instance, investors' appetite for risk could prove volatile should conditions in the global economic environment deteriorate. According to the same principle, the so far untested resilience of the CRT market to less supportive economic conditions or periods of market stress remains a factor of uncertainty which deserves monitoring.
- Changes to the loan market structure, including weaker covenants, the move to non-amortising structures, and a rise in "equity cures" which allow private equity sponsors to inject equity to avoid covenant breaches, may make it harder to tell when

the LBO market is entering a difficult phase. From this point of view, it cannot be excluded that the current market assessment of the strength and resilience of the LBO market is somewhat biased as the availability of equity cures and existing incentives for investors to avoid complex workouts may temporarily help in hiding or postponing existing problems.

Although the muted systemic risk potential identified in this report does not appear to warrant a large and coordinated regulatory involvement in LBO activities at the EU level, *awareness of the risks and vulnerabilities in these rapidly growing markets should nevertheless be increased*. A number of local initiatives have already been taken in various EU countries to address specific risks and to define appropriate risk mitigation procedures.

GLOSSARY

Bridge loan – interim financing covering the time lag between financial commitment and issuance of a high-yield bond or longer-term debt. Bridge loans are typically taken out for periods of two weeks to three years in order to finance projects or prior to a new fundraising round.

Bullet loan – loan that has a one-time payment of principal and interest at its termination (see *Senior debt*).

Collateralised debt obligation (CDO) – structured debt security backed by the performance of a portfolio of securities, loans, or credit default swaps, and where securitised interests in the portfolio's performance are divided into tranches with differing repayment and interest-earning streams. When the tranches are backed by securities or loans, the structure is called a “cash” CDO, if backed by only loans it is called a collateralised loan obligation (CLO), and when backed by CDSs, it is a “synthetic” CDO.’

Covenant – loan agreement that requires the borrower to fulfil certain conditions (e.g. timely loan re-payments) or forbids the borrower from undertaking certain actions (e.g. selling firm's assets). *Covenant-lite* debt contracts are characterised by minimal restrictions placed on the borrower's behaviour.

Debt structuring – a leveraged loan is typically structured in several tranches with different risk-return characteristics (e.g. the probability of default and expected recovery rate), (re)payment conditions (e.g. fixed versus non-amortisation schedule, and different interest and maturity schemes) and seniority.

Initial public offering (IPO) – a company's first sale of stock to the public.

Leverage – the proportion of debt to equity on a company's the balance-sheet.

Leveraged loans – bank loans that are rated below investment grade (BB+ and lower by S&P and Fitch, Ba1 and lower by Moody's) to firms characterised by a high leverage (e.g. high debt-to-EBITDA ratio).

Recapitalisation – restructuring of a company's debt and equity mixture often with the aim of making a company's capital structure more stable. Increasingly in the LBO context, recapitalisations are being used by the owners of a company to generate cash by refinancing the capital structure in such a way that (parts of) the equity tranche of the former capital structure are released.

Secured debt – debt backed by collateral or other assets.

Securitisation – creation of securities from a pool of pre-existing assets and receivables that are placed under the legal control of investors through an SPV (see below). With a “synthetic” securitisation, the securities are created out of a portfolio of derivative instruments.

Senior debt – debt that has priority of claim ahead of other obligations. In the case of LBO financing, senior debt is secured against the target company's assets and shares. It is generally issued in various loan types (or tranches) with different risk-return profiles, repayment conditions and maturity. These are (ranked by seniority):

- *Term loan A (or tranche A)*: safest type of senior debt, generally with a fixed amortisation schedule and maturity between six and seven years;
- *Term loan B (or tranche B)*: lower-grade senior debt tranche, typically featuring a bullet structure;
- *Term loan C (or tranche C)*: lowest- grade senior debt, also featuring a bullet structure.

Special purpose vehicle (SPV) – an SPV is a firm or legal entity established by a sponsoring firm to perform some narrowly-defined or temporary purpose without having to carry any of the associated assets or liabilities on its own balance sheet.

Subordinated debt – debt having a claim against the issuer's assets that is lower ranking, or junior to, other obligations, and is paid after claims to holders of senior securities are satisfied. In the case of LBO financing, subordinated debt is usually unsecured and issued in various tranches with different risk-return profiles, repayment conditions and maturity. Large LBO transactions tend to include more tranches in the capital structure than smaller ones. These tranches (ranked by seniority) are:

- *Second lien debt*: debt that ranks pari passu in right of payments with first lien debt, being secured on the same collateral. However, inter-creditor arrangements can, for example, prohibit or restrict the ability of second lien creditors to exercise remedies against the collateral and challenge any exercise of remedies by the first lien lenders.
- *High-yield bonds*: bonds with non-investment grade credit ratings that offer investors higher yields than bonds of financially sound companies; also known as “junk bonds”
- *Mezzanine debt*: debt with a lower seniority to both senior and high-yield debt, given its higher degree of embedded credit risk due to equity-like characteristics (e.g. it incorporates equity-based options)
- *Payment-in-kind loans or notes*: securities which give the issuer the option to make interest/capital payments in the form of additional securities or to postpone such payments if certain performance triggers have not been met.

ANNEX

Chart S1 Concentration of top ten deals in total LBO portfolio by business model

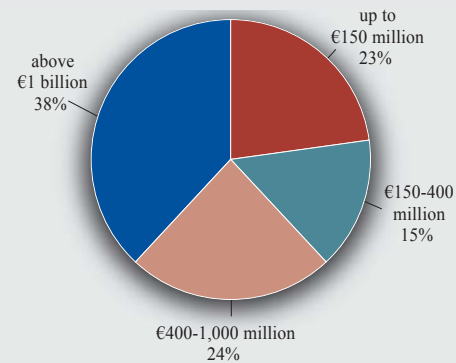
(June 2006, percentages)



Source: BSC.

Chart S2 Size of LBO transactions: balanced model

(June 2006, percentages)

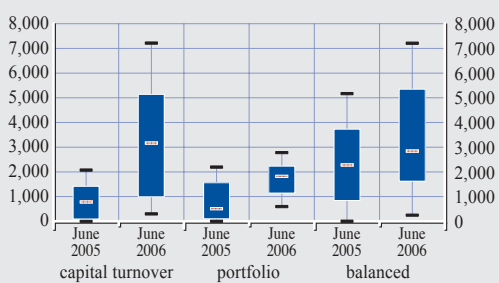


Source: BSC.

Chart S3 LBO debt – senior and subordinated – changes over time

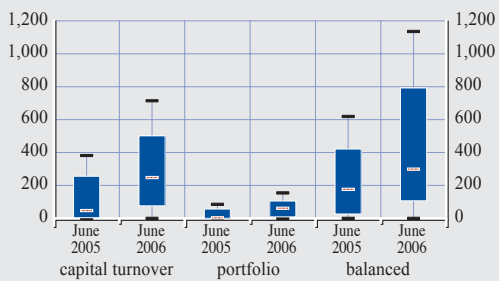
Senior debt

(EUR millions)



Subordinated debt

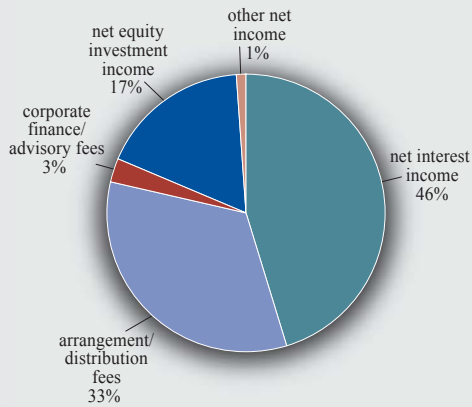
(EUR millions)



Source: BSC.

Chart S4 Structure of net income derived from LBO activities (%): balanced model

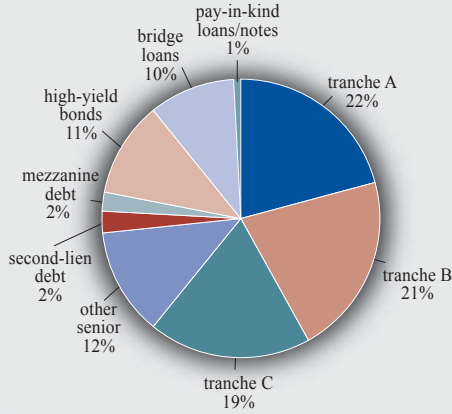
(June 2006, percentages)



Source: BSC.

Chart S5 Debt composition of top five deals by business model: balanced banks

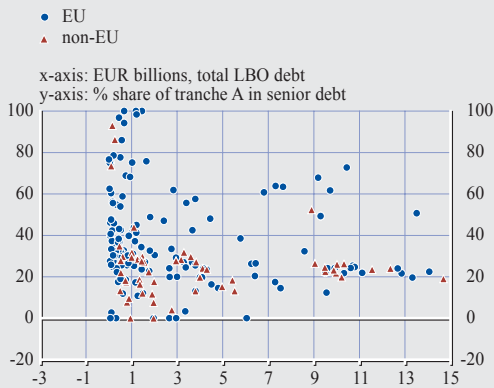
(June 2006, percentages)



Source: BSC.

Chart S6 Tranche A in senior debt as a share of total LBO debt in individual transactions

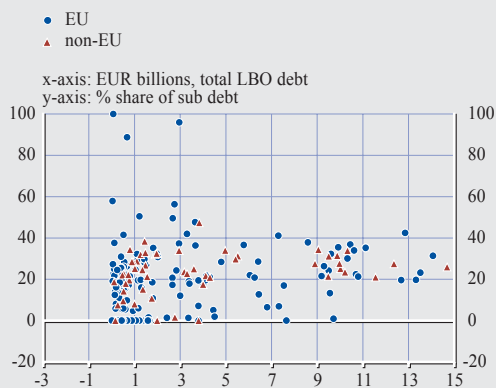
(June 2006, percentages)



Source: BSC.

Chart S7 Subordinated debt as a share of total LBO debt in individual transactions

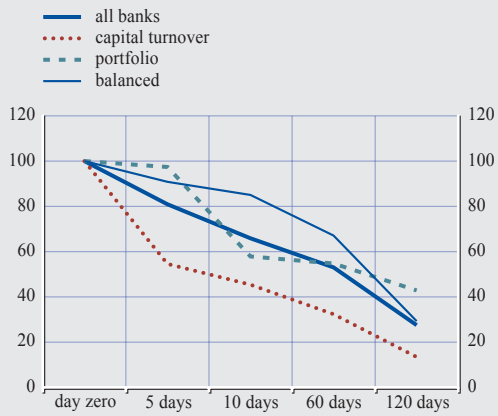
(June 2006, percentages)



Source: BSC.

Chart S8 Top five deals: reduction in senior debt exposures overtime by business model

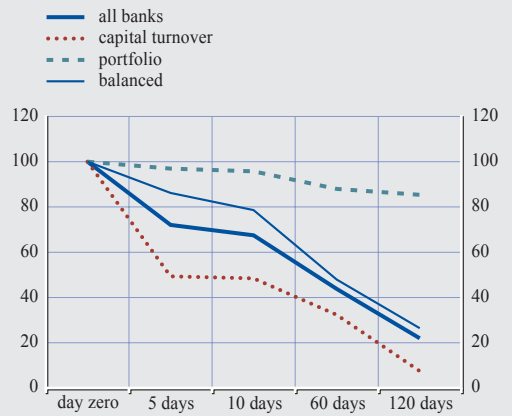
(June 2006, percentages)



Source: BSC.

Chart S9 Top five deals: reduction in subordinated debt exposures overtime by business model

(June 2006, percentages)



Source: BSC.

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