

## Chapter 3

# Asset-based finance for SMEs

*This chapter describes the functioning of asset-based finance, which includes asset-based lending, factoring, purchase-order finance, warehouse receipts and leasing, and comments on how it can serve diverse SME financing needs in varying circumstances. The chapter compares the functioning mechanisms of the different asset-based tools, comments on the profile of firms that are suited for each one of them, and discusses the key enabling factors for their development. It then illustrates trends in asset-based finance across world regions and provides examples of regulatory reforms and policy programmes to support the development of asset-based financing for SMEs.*

**A**sset-based finance, which includes asset-based lending, factoring, purchase-order finance, warehouse receipts and leasing, differs from traditional debt finance, as a firm obtains funding based on the value of specific assets, rather than on its own credit standing. Working capital and term loans are thus secured by assets such as trade accounts receivable, inventory, machinery, equipment and real estate.

The key advantage of asset-based finance is that firms can access cash faster and under more flexible terms than they could have obtained from a conventional bank loan, regardless of their balance sheet position and future cash flow prospects. Furthermore, with asset-based finance, firms that lack credit history, face temporarily shortfalls or losses, or that need to accelerate cash flow to seize growth opportunities, can access working capital in a relatively short time. In addition, asset-based financiers do not generally require any personal guarantee from the entrepreneur, nor that s/he give up equity.

On the other hand, the costs incurred and/or the complexity of procedures may be substantially higher than those associated with conventional bank loans, including asset appraisal, auditing, monitoring and up-front legal costs, which may reduce the firm's levels of profits. Also, funding limits are often lower than in the case of traditional debt.

## Forms of asset-based finance

### **Asset-based lending**

#### **Modalities**

Asset-based lending (ABL) is any form of lending secured by an asset. It is thus a transactions lending technology in which financial institutions address the problem of information asymmetry by focusing on a subset of the firms' assets, as the primary source of repayment (Berger and Udell, 2006). Typically, four types of asset classes are secured under ABL: accounts receivable, inventory, equipment and real estate.

The amount the firm can borrow depends on the appraised value of the selected assets, rather than on the overall creditworthiness of the firm, taking into account the ease to sell off the assets should the borrower be unable to generate cash to repay the loan. The amount of credit extended is linked to the liquidation value of the assets, which is estimated and monitored on the basis of hard data, often relying on industry-specific knowledge. Thus, monitoring and asset evaluation methodologies are of the utmost importance for this type of lending, which explains the historical use of "tangible" assets to secure loans and, on the other hand, the limited exploitation of intangibles, such as trademarks, patents and copyright. However, as methodologies for evaluating intangible assets become more accepted, these assets can also increasingly be used as collateral (Box 3.1).

The asset-based loan agreement often allows for a revolving arrangement, whereby, if the borrower needs other advances, these can be secured by more assets, such as more receivables, as others are collected and paid off. Hence, as the borrower generates receivables from new sales or builds more inventories, these assets are generally eligible for inclusion in the 'borrowing base'. This arrangement requires constant monitoring of

### Box 3.1. Intangible Asset-Based Lending (IABL)

Intangible Asset-Based Lending (IABL) leverages a portfolio of Intellectual Property (IP) or other intangible assets to secure a loan. The loan can be backed by the stream of revenues tied to a single intellectual asset or to the firm's entire portfolio. In either case, firms can secure their intellectual assets in addition to a blanket lien against common collateral such as real estate or receivables.

In recent years, a variation on IABL, royalty financing arrangements, has developed, especially in the pharmaceutical and biotechnology sectors. In this case, lending is secured by royalty interest and revenue interest transactions, whereby, similar to a securitization transaction, loans are backed by a current or prospective royalty stream. Whereas "royalty interests" are already cash-flow positive, the "revenue interests" are riskier for the financier, as these are revenues anticipated to be derived from an identified product and related intellectual property. They apply to firms that are close to the commercial launch of a product or device and, due to the greater level of risk, the investing institution is generally able to negotiate more favourable terms. Unlike a securitisation, the loans are generally not bundled and sold to the general public, but held by a speciality investment fund.

Typically, firms specialising in IABL partner with banks or private equity firms that ultimately provide the funds, to secure a line of credit for the target company. As IABL requires flexibility and specialisation to account for differing and unique factors inherent in intangible assets, these specialised firms provide financial institutions with additional protections to offset the complexity and uncertainty surrounding intellectual assets valuation.

Source: Ellis and Jarboe (2010), Jung and Tamiseia (2010), EC (2014a).

collateral by the lender to control and manage the credit risk. Typically the lender audits the borrower's assets daily, to monitor and secure the performance of the loan (GE Capital, 1999; Caouette et al., 2008).

As unsecured loans, asset-based loans expose the lender to the generic credit risk, that is, to the risk related to "integrity, moral character, debt-paying habits and ability of the proposed borrower" (Clarke, 1996, p. 15). In addition the asset-based lender is exposed to risks that are specifically related to the securing mechanisms underlying ABL, such as (Caouette et al., 2008):

- Collateral risk, i.e. the risk that the collateral securing the loan will decline in value after loan inception and be insufficient to liquidate the loan. In the case of account receivables, for instance, the asset can be diluted by credit notes (for returns, errors or damages), write-offs (i.e., for bad debt), payment discounts, as well as customer rebates and allowances (Benchaya and Anderson, 2010);
- Collateral illiquidity, i.e. the risk that the process to liquidate the collateral will be time-consuming and costly, detracting from the ultimate returns. Accounts receivable are considered to be highly liquid assets, whereas inventory may be more difficult to value, monitor and liquidate;
- Legal risk; i.e. the risk of incurring costly legal mistakes, due to inadequate legal documentation or mismanagement of the loan facility.

In light of the above risks, particularly of the expected asset value dilution and losses, asset-based lenders typically lend at a discount to the actual value of the secured assets. For accounts receivables, a loan-to-value ratio (LVR) of 80-85% is considered normal

(Caouette et al., 2008). On the other hand, in the case of less liquid assets, the LVR can be significantly lower. For instance, if inventory is the secured asset the lender might extend a credit of up to 40% of the estimated value. Lenders often seek advice regarding the appropriate LVR from specialised appraisal firms, which evaluate the collateral value of inventory goods (GE Capital, 1999). The interest rate applied on the loan also reflects quality and liquidity of the assets, and is often higher than the rate on conventional bank loans. Furthermore, a service charge to cover the costs of administration of the account adds to the costs for the borrower.

Although the costs of funds may be higher than in traditional lending, a decline in the costs of asset-based lending has been observed over the last decades, as this type of financing, which was earlier considered to be a last resort option for firms in financial difficulties, has become widely accepted by financiers and increasingly popular in the business community (Caouette et al., 2008). Over time, the increased competition within the industry has also contributed to bringing down the costs of asset-based lending, as a variety of players entered the market, including traditional commercial finance companies, hedge funds and cash-rich companies seeking to diversify their business.

Against this medium- to long-term trend, however, the 2008-09 global financial crisis has brought about increased costs for asset-based lending, as with other more traditional forms of lending. This is in part because the value of collateral decreased, while the probability of default increased. Basel III has also been producing effects in the industry, raising the prices of lending products, although, as Nuccio and Loewy (2013) note, the new regulatory framework does not especially disfavour loans secured by inventory and receivables. Rather, some indirect effects are to be expected, in the sense that the new regulatory standards may increase the costs of funding from bank regulated entities, and may reduce the level of assets deployed by banks to this sector. This may create opportunities for non-bank lenders, which are not subject to the same costly capital requirements.

### ***Profile of firms***

The use of assets to generate cash flow presents advantages for start-up companies, which have limited credit history, but also for fast-growing and cash-strapped firms, which can respond more rapidly to their short-term cash needs than through traditional debt channels.

ABL can serve in particular the needs of SMEs that are at a growth stage or that face seasonal build-up of inventory or receivables, whose value can be hardly reflected into traditional loans that have already been underwritten. In this regard, ABL allows for more flexibility than traditional lending in accessing a credit line, whose limit can be expanded quickly, as the value of the underlying assets change. For instance, in the case of a revolving credit facility secured by receivables, the outstanding loan amount may fluctuate on a daily base, providing a significant degree of flexibility to the borrower to finance evolving working capital needs.

The lender's close monitoring of the secured assets' value also implies that highly leveraged firms, or firms that have experienced recent losses, can obtain cash flow more easily than it is generally the case for conventional lending. This is because conventional lenders, which do not rely on specific assets to support their loan and are not closely monitoring any underlying collateral, typically require borrowers to maintain a conservative financial position over the loan terms (Smith & Howard, 2013). In this regard, through ABL, companies with strong accounts receivables and a solid base of creditworthy customers

can overcome temporarily lending constraints or accelerate access to working capital. For this reason, ABL is usually considered to be a transitional source of financing, to weather temporarily cash flow shortfalls, when the firm does not qualify for traditional bank lending, or to take advantage of growth opportunities.

The broad range of assets that can be used to secure the loan (e.g. stocks or inventory, plant and machinery, property, brands and intellectual property) implies that ABL can serve firms in many different sectors, including manufacturing, retail and distribution, and other service industries.

Asset-based lending is also apt to fund businesses at times of transition and restructuring, such as in the instance of mergers and acquisitions, management buy-ins and by-outs, when there is a need for increased liquidity in a short time. Indeed, in the case of acquisition, it is possible to use the assets of the company being acquired to finance the acquisition itself. This can be especially advantageous when the value of receivables or inventory of the target firm is significant in relation to the price of acquisition (GE Capital, 1999).

### ***Enabling factors***

ABL relies on a sophisticated and efficient legal system (Beck and Dermirguc-Kunt, 2006). In particular, the commercial law in security interests is crucial in determining the efficacy of the collateral in the loan contract. As Berger and Udell (2006) highlight, key issues include clarity in the country's commercial law on how a collateral lien (i.e. the obligation or claim annexed to a property) can be perfected, how collateral priority is determined, and how notification of a lien is made.

As a case in point, in the United States, the growth of the ABL market is favoured by Article 9 on "Secured Transactions" of the Uniform Commercial Code (UCC), which includes blanket filings on account receivables and inventory,<sup>1</sup> and a well-developed electronic registration systems, which temporally defines lien filings. On the other hand, asset-based lending is made especially difficult by commercial laws that do not allow lenders to file a single lien on all existing and future accounts receivable and inventory, but rather require that each single asset is identified by invoice and serial number as it is generated (Berger and Udell, 2006).

The development of ABL also depends on specialised expertise by financiers, which need to appraise industry-specific assets, within the framework of rapidly changing financial and economic environments. Industry-specific knowledge is thus typically required and field examiners may spend considerable time assessing the assets proposed by the borrower for securing the loan. In the case of trade accounts receivables, for instance, this may include confirmations, testing of invoices, review of customer agreements, and analysis of accounting reserves, among others (Banchaya and Anderson, 2010). The professional appraisal by a reliable firm is generally a key element in the decision to lend (Clarke, 1996) and, for this reason, the growth of specialised service firms can importantly support the development of ABL markets.

### ***Factoring***

#### ***Modalities***

Factoring is a supplier short-term financing mechanism, whereby a firm ("seller") receives cash from a specialised institution ("factor"), in exchange for its accounts receivable, which result from the sales of goods or provision of services to customers ("buyers"). In other terms,

the factor buys the right to collect a firm's invoices from its customers, by paying the firm the face value of these invoices, less a discount. The factor then proceeds to collect payment from the firm's customers at the due date of the invoices. The difference between the face value of invoices and the amount advanced by the factor constitute the "reserve account". This is paid to the seller when the receivables are paid to the factor, less interest and service fees. Typically, the interest ranges from 1.5% to 3% over base rate and service fees range from 0.2% to 0.5% of the turnover (Milenkovic-Kerkovic and Dencic-Mihajlov, 2012).

Factoring is thus a transactions funding technology, based on "hard" data, similar to asset-based lending, as the financing depends on the value of an underlying asset, rather than on the creditworthiness of the firm. However, it is different from asset-based lending in the following aspects: i) it involves exclusively the financing of accounts receivable, rather than a broader range of assets; ii) the underlying asset is sold to the factor at a discount, rather than collateralised; iii) it is a bundle of three financial services, i.e. a financing component, a credit component, and a collections component, as in most cases the borrower outsources to the factor its credit and collection activities (Berger and Udell, 2006).

Factoring also differs from conventional bank lending and asset-based lending, in that it does not generate debt on the firm's balance sheet and there are no loans to repay. By selling accounts receivables to a factor, the firm is able to rapidly convert accounts receivable into another asset, cash.

A key aspect of factoring is that the problem of asymmetric information between lender and borrower is addressed by focusing on the quality of a third party, the borrower's customer. It is the latter that becomes the debtor and responds for its obligations directly to the factor, which entirely assumes the credit risk and the collection of accounts.

Through factoring, thus, it is the factor which assumes the costs implied by collecting information about buyers, which explains the specialisation of factors on specific industry segments, to develop more accurate market knowledge and credit-risk assessment (Soufani, 2011). In the case of "ordinary factoring", when the firm sells its complete portfolio of receivables, these costs can be significant, as the factor needs to collect credit information and calculate the credit risk for many buyers. For this reason, ordinary factoring is most frequently observed in countries with a well-developed financial infrastructure (i.e. credit bureaux, credit registries), which allows the factor to access information about many buyers at a relatively low cost, while diversifying risk.

In the case of "reverse factoring", the factor purchases accounts receivables only from selected customers of the firm. In this way, the factor increases its risk exposure to one customer, but the costs of acquiring information and assessing credit risk are lower and, typically, only high-quality receivables are accepted. In this regard, reverse factoring can be especially suitable for financing receivables from accredited firms that are more creditworthy than the seller, such as large firms or foreign groups. In other terms, factoring may allow high-risk suppliers to transfer their credit risk to their highest-quality customers. Indeed, a reverse factoring arrangement is typically engineered by a large customer that is purchasing goods from a number of small suppliers. In this case, the factor agrees to finance any of the receivables of the large firm generated by invoices from the small suppliers. The benefit for the large customer is that, in exchange for working capital financing, the sellers may agree on more favourable sales terms (Berger and Udell, 2006; Klapper, 2006).

Reverse factoring is a key component in Supply Chain Finance, a set of arrangements between members of the supply chain, mainly in terms of financial intermediation. In this

setting, reverse factoring is a means for creditworthy buyers to facilitate favourable financing options for their suppliers, by explicitly confirming deliveries and resulting payment obligations to a factor (Klapper, 2006; van der Vliet et al., 2013).

Factoring can also take place across borders (“export” or “international” factoring), reducing the risk of international sales. By outsourcing the credit function to a factor, exporters can significantly reduce the cost of collecting credits overseas, as well as the exchange rate risks. The “export factor” identifies an “import factor” in the foreign market and assigns this correspondent the receivables. It is the import factor that, for a fee, investigates the credit standing of the buyers and establishes lines of credit with them. In fact, export factoring presents advantages also for buyers, which do not need to open letters of credits and sustain the related charges. The import factor collects the full invoice value at maturity and transfer funds to the export factor, which then pays the exporter the outstanding balance (FCI, 2013). As the evaluation of the buyers’ credit standing is conducted by the import factor before agreeing to purchase the receivables, the approval of the factoring arrangement can also provide the seller an important signal about the foreign business partners (Klapper, 2006).

In this regard, factoring is also an instrument of *trade finance*, which is often a key tool for SME international activity and comprises other diverse financing mechanisms, such as lending, issuing letters of credit, export credit and insurance.

Although under factoring financing does not depend on the firm’s overall creditworthiness, information about the seller may be used by the factor to determine the “advance rate” of receivables, that is, the share of their value advanced to the seller. This rate is typically based on historical dilution experience and may be adjusted over time to take into account changes in specific receivables (Klapper, 2006).

The seller may incur additional costs, such as credit protection charges, in the case of “non-recourse” factoring, whereby the factor assumes title of the accounts and most of the default risk, because it does not have any claim (i.e. “recourse”) against the supplier if the accounts default. On the other hand, in the case of “recourse” factoring, the factor has a claim against the seller for any account payment deficit. However, even under “non-recourse” factoring, there is some risk sharing between the factor and the seller, in the form of the “reserve account”, i.e. the difference between the actual value of the accounts and the advance rate, which can be used by the factor to cover payment deficiencies. Across OECD countries, “non-recourse” factoring is largely adopted, whereas in emerging markets most factoring is done on a “recourse” basis, due to the greater difficulties the factor encounters in assessing the default risk of the underlying accounts.

### **Profile of firms**

As a source of working capital financing, factoring is of particular interest for high-risk and informationally non-transparent firms, as well as firms with a solid base of customers but high investments in intangible assets, which cannot be used to secure bank loans. This is because the factor primarily evaluates the creditworthiness of the firm’s customers and the validity of invoices, rather than the firm’s financial statements, its fixed collateralisable assets or credit history. Hence, factoring may be especially advantageous for a SME that has difficulties in accessing bank lending but supplies larger customers, which are seen as more creditworthy than the firm itself. Milenkovic-Kerkovic and Dencic-Mihajlov (2012) underline in particular the advantages of factoring for service firms, which tend to be

payroll-intensive, have usually little proper collateral that can be used to secure traditional bank loan, and may have high investments in intangible assets, which are not always reflected in financial statements.

Factoring may also represent an instrument of choice to manage credit risk when the seller has a very sparse specialised investment in its customers and the cost of monitoring them is high (Smith and Schnucker, 1994). This can be the case also for customers located overseas, when export or international factoring is used. Through factoring, the seller outsources the monitoring functions and may indeed consider acceptance of invoices by the factor as a signal of its customers' creditworthiness.

Factoring is also useful for firms that grow faster than their credit lines, as, similarly to asset-based finance, it provides greater flexibility than conventional loans. In fact, as each account receivable is evaluated individually, in the event of increased sales, new receivables can be sold rapidly to a factor and the advanced cash used to respond to new orders.

As the extension of working capital does not depend on the firm's credit history, factoring can also serve the needs of new and young companies. At the same time, however, start-ups with low turnover may be little attractive to factors, as they are often too small, have an inadequate customer base and lack a track record in sales and economic management (Soufani, 2001).

### ***Enabling factors***

On the regulatory side, factoring requires a legal environment that allows to sell or assign accounts receivables and enforce the underlying contracts, such as norms that entitle the factor to take legal recourse for recovering assigned receivables from the client's customers. In this regard, a reference to factoring in the law, or even a "Factoring Act", which recognises it as a financial service, can clarify the nature of the factoring transactions and the ruling in case of default of sellers or customers.

Factoring can be favoured by commercial laws that recognise it as a "sale and purchase". In this case, factors are not creditors, hence, in the event of the seller's bankruptcy, the factored receivables are not part of the bankruptcy estate. Rather, they are recognised as property of the factor on which other creditors cannot advance claims (Klapper, 2006). On the other hand, in some countries, especially civil law countries, factoring may encounter important legal restrictions, such as prohibition of transfer of future and bulk receivables or obligatory notification of the debtor, which may limit transferability of receivables or create additional costs (Milenkovic-Kerkovic and Dencic-Mihajlov, 2012).

However, since the underlying assets are removed from the firm's bankruptcy estate and owned by the factor, rather than being pledged as collateral, factoring depends less on good collateral laws and efficient judicial systems than traditional and asset-based lending (Berger and Udell, 2006). According to Klapper (2006), this explains why this funding mechanism might play an especially important role for SMEs in emerging markets, characterised by weak contract enforcement.

Nevertheless, the development of factoring can be constrained by other tax, legal and regulatory aspects. With regard to tax treatment, factoring can be at disadvantage with respect to traditional debt financing if interest on factoring is not deductible in the same way as interest payments to banks. Also, VAT taxes may be applied on the entire transaction, rather than on service fees only, and stamp taxes may be imposed on factored invoices.



A weak information infrastructure may discourage factoring, imposing excessive burdens on factors for collecting information about customer's creditworthiness and for assessing credit risk. Since the factor needs to collect information and assess credit risk for all of the firm's customers (or a selected number of high quality buyers), the cost and time required strongly depend on the availability of a good credit information infrastructure, for instance in the form of well-developed credit bureaux or registries.

### **Purchase Order Finance**

#### **Modalities**

Purchase Order Finance (POF) is a highly targeted form of asset-based finance, intended to allow a firm to fill a particular customer order, thus to seize the market opportunities that would be lost due lack of financial resources to buy inputs and deliver the output.

POF funds the production stage of an SME's activities, as it consist in a working capital advance to cover part of the production of a good or service demanded by one or more specified customers. In more details, through POF, the SME obtains a verified purchase order from a customer and estimates the direct costs required to produce and to deliver the product, which may include labour, raw materials, packaging, shipping, and insurance. The purchase order is submitted to a financier, which bases the credit decision on whether the order is from a creditworthy customer or is backed by an irrevocable letter of credit from a reliable bank and on whether the SME can produce and deliver the product according to the terms of the contract. If the loan is approved, the financier advances a share of the total order value, typically paying the approved costs directly to the suppliers. Once production and delivery are completed, the accounts receivables from the customer are either assigned to the financier, as in the case of factoring, or the payment is directed into an account under the financier's control. Similar to factoring, when the financier receives payment, it deducts the amount advanced and interest or fees, and remits the balance to the SME (USAID, 2009).

As in the case of factoring, POF allows the SME to transfer the credit risk to a more creditworthy customer, which is often a larger firm or a government agency. However, the advance rate is generally lower than in the case of factoring, as POF implies higher costs and risks for the financier. In fact, this mechanisms requires more intensive monitoring of the firm's operation and the financier assumes the risk in the case that the firm will not be able to meet the order, as well as the risk related to payment deficiencies by the customers. As a consequence, interest rates and fees are typically higher than with other forms of asset-based finance. Also, the financier can take guarantees and other collateral, such as inventory and bills of exchange, to mitigate risk.

Furthermore, the PO lender may require that a factor intervenes in the transaction, if the payment terms of the customer are beyond a certain threshold (i.e. 60 or 90 days). The factor buys the outstanding invoices at a discount and thus provides immediate payment to the PO lender, and collects the full amount of the invoices at a later time. As the factor adds its profit in the process, the overall costs of the operation for the SME may be significantly higher.

*Pre-export finance* transactions are similar to POF operations, but are specifically applied to export orders. They consist of the extension of financing against orders that have been placed and confirmed by foreign buyers, after the lender has evaluated their

creditworthiness. In addition to risks implied by a traditional POF operation, the financier needs also to evaluate the political and legal risks implied by the cross-border transaction, such as the risk of expropriation, sanctions, discriminatory change of law or the impact of local insolvency law.

### ***Profile of firms***

POF can serve the needs of growing firms, with little access to working capital and poor cash flow, which receive orders that are larger or more frequent than their current capacity to pay suppliers upfront. In this regard, POF is generally not a replacement for conventional financing. Rather, as it provides rapidly large amounts of new capital, it can be used alongside lending facilities to handle surging capital requirements brought on by accelerated growth or peak seasonal sales (Maselli, 2000; USAID, 2009).

At the same time, as the financier primarily considers the creditworthiness of the client who has created the purchase order, it can also apply to new firms with little credit history and to high-risk and informationally non-transparent firms, which would not qualify for conventional bank loans. As in the case of factoring, the SME's creditworthiness is typically enhanced by the link to a larger company placing the purchase order. In this regard, POF can be an effective financing instrument for small firms participating in supply chains, as part of the Supply Chain Finance arrangements.

As a financing mechanism that supports the production or distribution activity, the type of businesses that qualify for POF are usually producers, distributors, wholesalers or resellers of manufactured products.

### ***Enabling factors***

The development of credit risk assessment technologies has favoured the consolidation and broader diffusion of POF. POF, factoring and trade finance, as we know them today, date back to the Middle Ages, to the business practices of English factors in the 14th through the 17th centuries, as England grew from an agrarian economy to a modern commercial economy. These practices evolved out of experiences of banks in 13th century Italy, which were grounded in factoring practices of the Roman Empire.<sup>2</sup> Throughout centuries, POF was provided by financial intermediaries engaged in a relationship model with customers, where the purchase order would act as sufficient collateral to finance the project (Davidson, 1986). In recent decades, particularly since the 1990s, the advances in technological platforms to assess risk facilitated the development of POF as an instrument to fund SMEs (van der Vliet et al., 2013), without restricting this to the relationship lending business model.

### ***Warehouse receipts***

#### ***Modalities***

Warehouse receipts (WHR) are an asset-based financing mechanism, whereby loans are secured by commodities deposited at a certified warehouse. Under this arrangement, commodity producers and traders deposit commodities at a warehouse, which offers secure storage and issues a receipt that certifies it is in possession of a specified quantity of a commodity that meets specified standards. The receipt can then be used by the depositor as collateral for a loan, whereby the lender places a lien on the commodity, so that this cannot be sold before the loan is repaid (USAID, 2009).

As in the case of asset-based lending, the amount that the firm can borrow is typically a share (50-80%) of the stored commodity value. The costs implied by the mechanisms for the borrower include interest, taxes and storage fees.

WHR can be organised under different warehousing arrangements: a) private warehouses, where manufacturing and warehousing take place under the same roof. It is thus the same manufacturer (borrower) that can issue a warehouse receipt to be used as a collateral with the lender; b) public warehouses, where a specialised operator stores commodities for third parties for a set fee and issues receipts; and c) field warehouses, in which a collateral management or credit support company takes over the warehouse of a depositor or a public warehouse by leasing the storage facility for a nominal fee, and becomes responsible for controlling the commodities to be used as collateral (Höllinger et al., 2009).

Beside the warehouse operator, the WHR system engages specialised service providers, such as those offering both depositors and lenders certification and inspection services, to ensure the warehouse meets necessary standards for safe and secure storage. In addition, insurance companies generally provide protection against commodity losses at the warehouse.

As the warehouses typically maintain records about producers' performance, this system may also work to build information on current and potential borrowers, which can be useful to financial institutions over time, especially when other credit history information is lacking. Also, as the system is based on consistent standards, their incorporation into receipts improves knowledge in the market, reducing information asymmetry along the value chain about products' quality and availability.

### ***Profile of firms***

WHR are apt for producers and traders of commodities that lack credit history or other collateral to access lending finance. The financial services provided by the system combine with other potential benefits, such as access to reliable storage and hence the possibility to sell the product over time, rather than solely at harvest periods, when prices of commodities may be especially low.

As such, WHR is especially advantageous for producers and traders of storable agricultural commodities such as grain, sunflower seeds and sugar. In these sectors, the use of stored commodities as collateral represents a solution to enhancing agricultural lending, and provides a valuable addition to the traditional use of real estate and land as loan collateral (Höllinger et al., 2009). For small producers, however, storage fees may be too high. This creates an incentive to pool commodities among small firms to access the WHR system (USAID, 2009).

### ***Enabling factors***

The WHR system relies on a legislative framework that protects the rights and interests of depositors in public warehouses, ensures the transferability of warehouse receipts and their legal equivalence with the stored commodity, defines clear procedures in case of bankruptcy of the warehouse operator, and protects a collateral lien. Furthermore, the system depends on a clear licensing framework for warehouses and a well-functioning mechanism or their control and oversight. In some countries, a Government Regulatory Agency exists, which is responsible for the licensing, regulatory and inspection procedures (USAID, 2007, 2009).

A well-defined system of grades and standards and access to reliable information on commodity market prices and conditions by depositors and lenders are key to the functioning of WHR. A good market information system reduces uncertainties regarding the value of the stored goods and allows for adequate evaluation of the collateral.

According to Höllinger et al. (2009), WHR also requires a predictable policy environment that preserves the incentives for private storage and financing, and governments should refrain from heavy and erratic intervention in commodity markets. In fact, a certain level of seasonal price fluctuation is needed to attract participants and enable them to recover storage and financing costs.

On the side of lenders, the system demands familiarity with the WHR mechanism and specific expertise on commodities, in order to monitor market trends and value loans properly. As Höllinger et al. (2009) highlight, based on the experience of WHR development in transition economies, building confidence in extending finance against warehouse receipts takes time. Initially, banks may only be willing to lend up to 55% to 65% of the collateral value. As confidence in the system grows, this level may increase to 80% or even higher.

### **Leasing**

#### **Modalities**

In many countries, leasing is a common mechanism to finance use and purchase of equipment, motor vehicles and real estate by firms. Analogous to other forms of asset-based financing, underwriting depends on the value of an underlying asset and on the ability of the firm to generate sufficient cash flow from business operations to meet regular payments, rather than on its overall creditworthiness as assessed through financial statements, credit history and fixed assets. Typically knowledge about results of business operations is used by the financier to generate indicators of the adequacy of prospective cash flows (Gallardo, 1997).

Specifically, a lease is an agreement whereby the owner of an asset (lessor) provides a customer (lessee) with the right to use the asset for a specified period of time, in exchange for a series of payments.<sup>3</sup> The lessor remains the legal owner of the asset throughout the contract, and ownership may or may not be transferred to the lessee at the end of the contract.

Under a “financial lease”, the customer carries the risks and rewards of the asset’s ownership, although the lessor remains the legal owner of the asset throughout the contract. In other terms, the lessee benefits from the economic life of an asset in a similar way to a legal owner and takes on related risks, such as maintenance and insurance responsibilities. This includes contracts where the length of the lease is close to the useful economic life of the asset, as well as contracts where the lessee has the possibility to become the owner of the asset at the end of the lease, automatically or purchasing the asset for a specified nominal amount (Oxford Economics, 2011). Typically, financial leases are used by firms to finance long-lived assets, instead of resorting to long-term borrowing for acquiring these assets (Clarke, 1996).

A “hire-purchase” contract works in a similar way to a finance lease, as the customer pays for an asset in regular instalment, while benefiting from its use. However, hire-purchase is a type of instalment purchase, with a well-defined purchase option for the customer, who agrees to pay the cost of the asset over time, including principal amount

and interest for the period the asset is used. In this case, the purchaser acquires the property of the asset on signing the agreement, but the ownership is transferred only upon the full payment of the purchase amount.

On the other hand, an “operating lease” is typically of a shorter duration than the useful economic life of the asset and the customer has no possibility to purchase it at the end of the contract, or can acquire it at a higher price than under a finance lease. An operating lease is thus essentially a rental contract for the temporary use of an asset (Oxford Economics, 2011; Kraemer-Eis and Lang, 2012).

In comparison with conventional bank financing, in a lease contract no or limited up-front cash down-payment or security deposit is required. In this way, leasing can finance a higher percentage of the capital cost of equipment thereby allowing the business entity to preserve its cash resources or existing bank facilities to meet working capital needs (Gallardo, 1997). On the other hand, over the economic life of the asset, the overall cost of accessing it may be higher than in the case of outright purchase, and the firm does not build equity in capital assets.

Another relevant difference with respect to conventional debt financing may concern the impact of the leasing contract on the firm’s balance sheet. A finance lease is generally capitalised on the balance sheet, thus adding to the leverage of the firms, although the firm can decompose the lease payment into interest and principal repayment and expense the interest paid on the lease each year, as well as depreciate the cost of the asset over the life of the asset. On the other hand, an operational lease is accounted among the expenses. In this regard, with respect to a bank-financed purchase of assets, the main advantage of lease financing is a significantly lower discounted present value of cash disbursements over the term of the lease. In fact, the aggregate periodic lease rental payments, which result from interest-related financing costs and payments against principal, can be booked by the lessee as a business expense to shield against tax liability on income realised (Gallardo, 1997).

As a form of short- and medium-term financing, leasing also presents relevant non-monetary advantages for businesses. Mainly, leasing contracts are typically flexible towards customers’ needs. They may allow buying the asset at termination of the contract, cancelling the lease before maturity of the contract, renewing the lease for additional periods, protecting the customer from increases in future lease rates, as well as tailoring lease payments to the cash flow generation pattern of the lessee (Slotty, 2009; Kraemer-Eis and Lang, 2012).

Leasing agreements are distributed through different channels, including bank networks, leasing companies, vendors and dealers of equipment. In many countries, the most popular channel for accessing lease contracts is at the point of sale of the asset, or through the vendor channel (Oxford Economics, 2011). The main advantage of this form is that leasing works as a “one-stop-shop”, for both the purchasing and the financing of the equipment.<sup>4</sup>

### ***Profile of firms***

Leasing can respond to the capital investment needs of new firms, which lack the working capital that may be needed for outright purchase of asset and lack the credit history that is generally required to source this capital from traditional bank channels. More generally, leasing can serve SMEs that do not qualify for conventional bank lending, due to high risk, opacity and lack of collateral. In fact, the lessor’s credit decision is mainly

based on the lessee's ability to generate cash flow from business operations, in order to meet lease payments.

Leasing can be an option also for firms facing financial difficulties. In some instances, cash flow is indeed generated by the use of the leased asset, which makes access to the leasing instrument easier for cash-constrained firms. Also, under bankruptcy rules, lease payments generally have priority over loan payments, so that the lessee is usually allowed to continue paying the lessor, which can always opt for taking back the leased asset (USAID, 2009). In this sense, as a legal owner of the asset, the lessor has a stronger security position than a traditional lender, which may imply less stringent criteria in the negotiation with lessees in the first place.

However, leasing can also be attractive for SMEs that have access to traditional bank lending, as a more flexible mechanism for using the services of capital assets, while preserving cash reserves. Leasing contract can be arranged in a relative simple and quick manner, since security arrangement is not needed, and lease payments can be aligned to the pattern of the expected cash flow.

Leasing can be especially advantageous for firms that anticipate changing their capital assets frequently, as it allows accessing equipment with minimal initial costs and moving rapidly to more up-to-date assets without incurring further capital outlays.

### ***Enabling factors***

The operation of leasing does not require a strong lending infrastructure. Indeed, as Berger and Udell (2006) underline, a weak regulatory environment that does not support the use of collateral and bankruptcy rights may encourage the use of alternative instruments, where the lender owns the asset. At the same time, leasing can be difficult to implement in countries that lack a national asset register, as illegal on-selling of leased assets is easier, or with weak laws on repossession, which undermine the ability of the lessor to repossess the asset in the case of default (USAID, 2009).

The development of leasing also depends on the rules that govern the institutions offering lease services. Leasing companies are typically non-deposit taking institutions and are therefore subject to less stringent capital requirements than banks, which may allow them higher leverage. On the other hand, the cost of money can be higher for these institutions, as they have to source funding from more volatile and expensive markets (Gallardo, 1997). In some countries, however, minimum capital requirements are imposed on non-bank lessors, implying limitation of lending to a proportion of their net asset value.

Tax regulation may affect leasing decision of firms, although the empirical evidence is not conclusive in this regard (Lasfer and Levis, 1998). In principle, tax breaks can make the leasing option advantageous over bank financing, particularly in the case of operational lease. In this case lessees can offset their full lease payments against income before tax, compared to the depreciation allowance or the interest charges on bank loans. In the case of finance lease deduction applies only to the interest component of the payment. The overall tax benefits of finance lease, however, depend on the type of asset leased and the rules over depreciation, which can be claimed by the lessee in its balance sheet. In addition, lessors may be able to pass on to lessees some tax benefits related to their depreciation charges as owners of the asset leased, by lowering their financing costs (Gallardo, 1997).

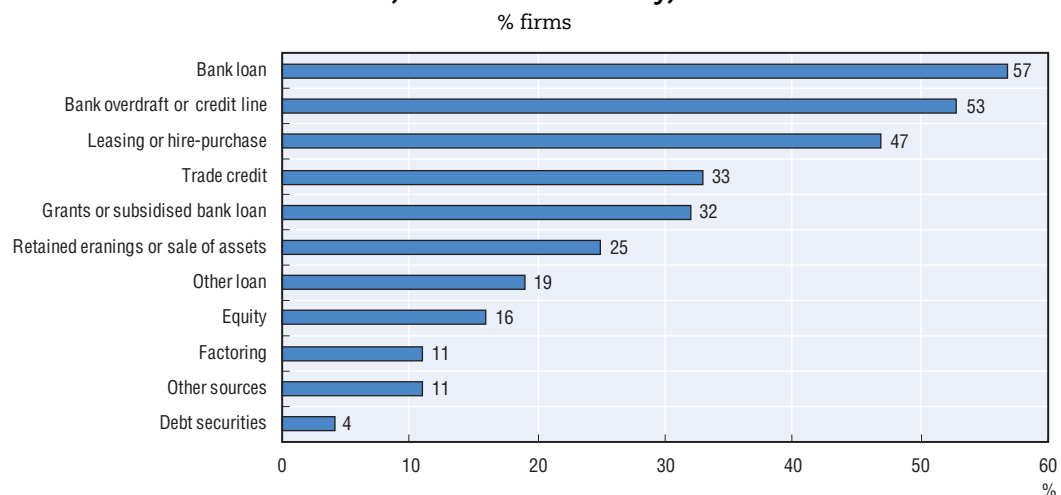
## Trends in asset-based finance

Asset-based finance is a popular form of finance for SMEs, whose diffusion has substantially increased over the last decades, although, on the supply side, it has been significantly affected by the financial crisis. In the case of leasing, for instance, refinancing conditions for leasing companies worsened in many countries (Kraemer-Eis and Lang, 2012). At the same time, as awareness increased and access to other bank debt has become more difficult for many businesses, demand for asset-based instruments has significantly increased since the 2008-09 global financial crisis. In the UK, for instance, the Asset Based Finance Association (ABFA) has reported a 10% growth for the industry over June 2012-June 2013, accounting for the highest level of advances to companies since 2008, in sharp contrast to the declining net lending figures in the country. Both small and large firms are contributing to this positive trend, with advances to small firms (GBP 500 000-1 million) recording a 6.2% growth in the second quarter of 2013.


Asset-based lending has been expanding in many OECD countries. In the United States, the Commercial Finance Association (CFA) has recorded steady increase in new credit commitments among asset-based lenders in 2011-12, following a decline in 2009-10. Its Quarterly Asset-Based Lending Index, built on evidence from 22 of the largest CFA members, shows that in 2Q2012 total commitments rose by 7.7% compared to the same quarter in 2011. However, businesses' persistent difficulties are reflected in loan performance: lenders' non-accruing loans as a percentage of their total asset-based loans outstanding rose slightly in 2011, after declining over 2010.<sup>5</sup> In the UK, the level of assets financed has increased by 33% since 2006, to GBP 36.2 billion in 2012, according to PricewaterhouseCoopers.<sup>6</sup>

In the aftermath of the crisis, asset-based lending has also been used as part of a loan package, the so-called "bifurcated collateral loan", whereby a portion of the loan is secured by accounts receivable or inventory (ABL portion) and another part is structured as a traditional term loan, secured by remaining assets, such as real estate, machinery and equipment or intellectual property (Migliero, 2012).

Figure 3.1. **Relevance of financing types for SMEs, EU28, ECB/EC SAFE survey, 2014**



Source: EC (2014b).

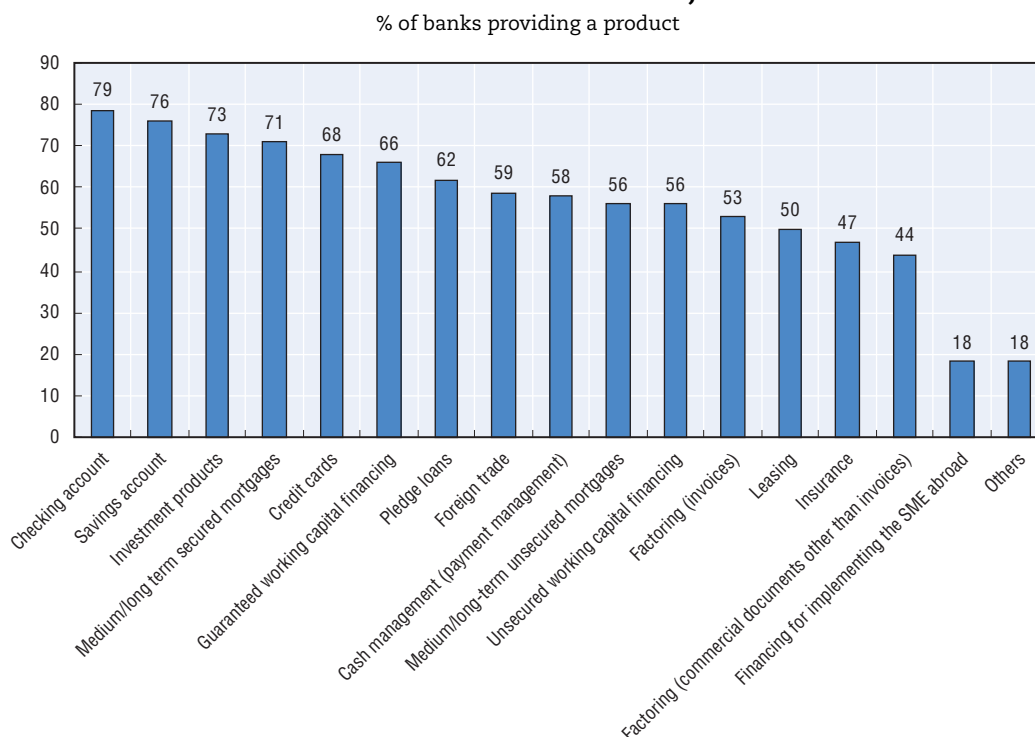
StatLink  <http://dx.doi.org/10.1787/888933292104>

In Canada, the Canadian Finance & Leasing Association (CFLA) estimates the asset-based financing and leasing industry to be the largest provider of debt financing to business customers and consumers in the country after the traditional lenders (banks and credit unions), with value of assets financed having increased from CAD 50 billion in 1997 to CAD 105.4 billion in 2007.<sup>7</sup>

The 2014 Survey on the Access to Finance of Small and Medium-sized Enterprises (SAFE), conducted by the European Central Bank and the European Commission, shows that, in EU28, “leasing or hire-purchase” ranks high among SME sources of finance. Nearly half of respondents (47%) used these asset-based instruments in the past or considered using them in the future. This is about at par with the use of “bank overdrafts or credit lines” whereas “bank loans” remain the main source of external financing for small businesses over time. The survey also indicates that trade credit is considered as a main source of external finance by 33% of SMEs in the European Union.

The 5th Regional Survey on Banks and SMEs in Latina America, conducted in 2012 by the Inter-American Development Bank on 106 banks across 20 countries, illustrates the range of products offered by banks to SMEs, and highlights in particular the increasing importance of asset-based instruments such as leasing and factoring (Figure 3.2). Leasing is supplied to SMEs by 50% of the surveyed financial institutions, whereas factoring is provided by 44% of the banks (IDB, 2012).

Figure 3.2. **Type of financial products offered by banks to SMEs, Latina America and Caribbean, 2012**



Source: IDB (2012).

StatLink  <http://dx.doi.org/10.1787/888933292117>

According to a survey conducted in 2012 by the International Chamber of Commerce (ICC) on more than 200 banks located in 110 countries, trade finance is in high demand, with the majority of transactions being based on *commercial letters of credit*, although a

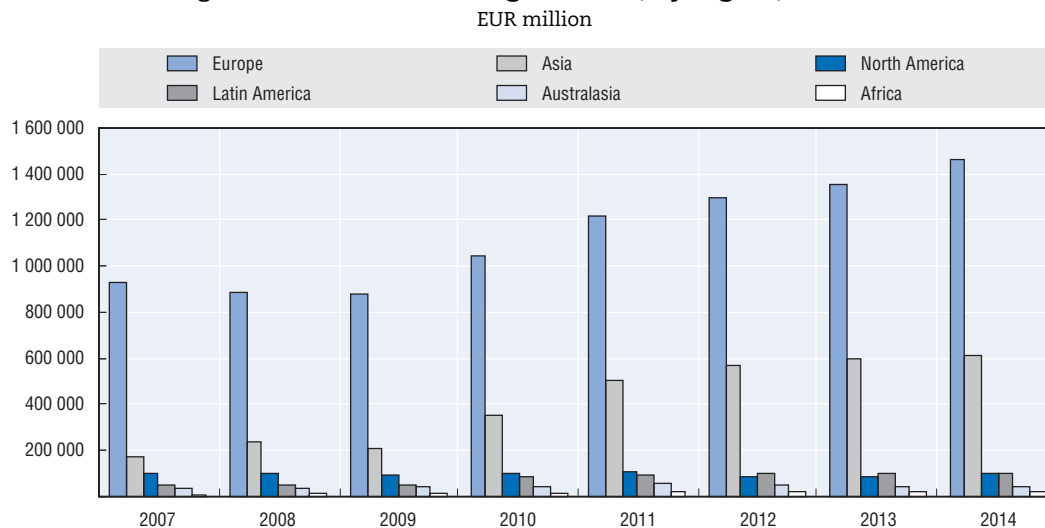


shortage of liquidity and a disproportionate aversion to risk continue to drive up interest rates on loans and advances in a number of countries (ICC, 2012).


Factoring is a key instrument in trade finance. Worldwide, the factoring industry has grown rapidly since the 1990s: the factoring volume increased by 88% between 1998 and 2004 (Klapper, 2006) and by 80% between 2007 and 2014 (FCI, 2015). However, most of the factoring business is concentrated in Europe, which accounted for 62.3% of the global turnover in 2014, with the four largest countries (UK, France, Germany and Italy) accounting for about 40% of the world volume. In the same year, the US and Japan accounted for 4.2% and 2.2% of the worldwide factoring turnover (FCI, 2015).

During the 2000s, factoring has been growing steadily in emerging economies, as recorded by Factors Chain International, a global network of leading factoring companies, which represents about 80% of the global cross-border factoring volume. In particular, the factoring industry has experienced important growth in China, recording an increase in world turnover share from 0.5% in 2004 to 9.4% in 2010 and to 17% in 2014, overcoming the United States and Japan in terms of factoring volumes. Overall, factoring in Asia has grown steadily since 2009; in 2014, it represented 26.2% of world turnover (Figure 3.3).

Figure 3.3. **World factoring turnover, by region, 2007-14**



Source: FCI (2015).

StatLink  <http://dx.doi.org/10.1787/888933292121>

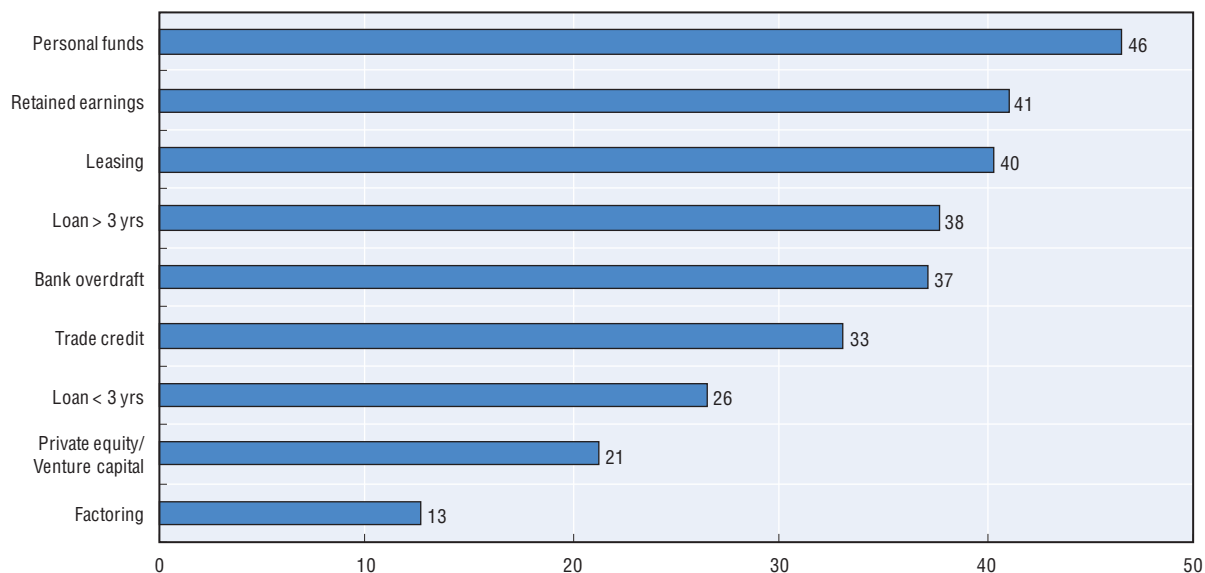
A 2006 study by the International Factors Group<sup>8</sup> estimates that across the EU, 80% of factoring customers are SMEs and that 69% of the industry turnover is generated by contracts with SMEs, although cross-country differences are significant, with, for instance only 20% of the turnover being generated with SMEs in Germany. As illustrated by the 2010 Eurostat survey, the share of SMEs that revert to factoring for accessing external finance is significant (16%) though lower than the share of SMEs that use leasing (55%) (OECD, 2012).

More detailed data by firm size are available for leasing, particularly in Europe, where SMEs account for 52% of the total business leasing volume, that is, for a leasing market estimated at about EUR 100 billion in 2010.


A 2011 survey-based report produced by Oxford Economics for Leaseurope, the European Federation of Leasing Company Associations, confirms the prominent and growing role of leasing for SMEs' business investment.<sup>9</sup> The study shows that, in 2010,

leasing was the most popular source of external finance, accessed by 40% of SMEs, compared to 38% that had accessed a bank loan with maturity greater than three years (in line with the average two to five year duration of a lease), 37% that had used a bank overdraft, and 13% that had funded investment through factoring (Figure 3.4). A similar picture is provided by the Eurostat survey on SME finance, which shows that, in 2010, of the surveyed SMEs searching for finance, 55% had accessed leasing and 16% had used factoring (OECD, 2012b).

Figure 3.4. **Investment by funding type, European SMEs, 2010**  
% of firms using finance type



Source: Oxford Economics (2011).

StatLink  <http://dx.doi.org/10.1787/888933292135>

The survey by Oxford Economics (2011) further highlights the greater use of leasing by larger SMEs (over 50% of medium-sized firms, compared to 40% of small firms and about 30% of micro firms), which can be explained by the overall more limited access by micro firms to external finance.

The evidence about “penetration rates” (total value of assets leased over investment) shows that SMEs use leasing to finance a greater proportion of their investment (16.7%) than business firms on average (12.9%). Also in relation to this indicator, medium-sized firms appear to use leasing more intensively, while micro firms rely more importantly on cash/equity (Figure 3.5).

The survey also indicated a positive trend in leasing’s penetration rate for SMEs, which was expected to increase to 18.6% in 2011, in contrast with the expected decrease in the share of investment funded by bank lending (from 31.2% in 2010 to 28.3% in 2011). Again, the increase in leasing’s share of total investment is driven by medium-sized firms, which were expected to increase their share from 17.6% to 20% in 2011.

The survey provides support to the argument that leasing can be advantageous for young firms, which encounter greater difficulties than established businesses in accessing traditional bank channels: about 50% of firms aged between two and five years use leasing compared to about 40% of firms aged more than ten years (Figure 3.6). A result along this line

Figure 3.5. **Source of funding for fixed asset investment by European SMEs, 2010**  
By firm size



Source: Oxford Economics (2011).


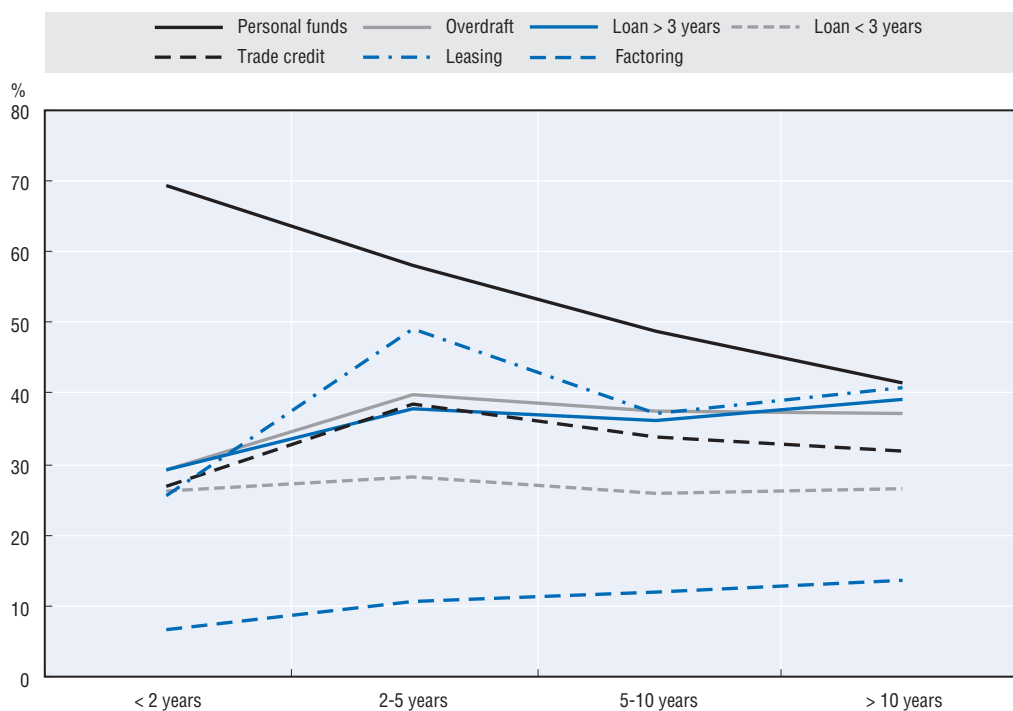
StatLink  <http://dx.doi.org/10.1787/888933292149>

Figure 3.6. **European SMEs using financing type by age, 2010**



Source: Oxford Economics (2011).

StatLink  <http://dx.doi.org/10.1787/888933292151>

is highlighted by OECD (2012), taking into account the success rates in obtaining leasing, which, across Europe, is relatively high for young, high-growth enterprises (“gazelles”), similar to the acceptance rates experienced by firms with a different growth pattern.

The study further illustrates that SMEs lease an extremely broad range of assets, although sectorial differences exist, with capital intensive industries leasing especially

machinery and industrial equipment and service firms financing larger sums on vehicles and ICT investments. The competitive price of leasing relative to other forms of finance is the advantage of leasing that is mostly cited by SMEs, although the instrument appears to be similarly appreciated across a broad range of other benefits, including cash flow management, absence of collateral requirements, and ability to adapt the length of the contract to the firm's needs.

According to other survey-based studies of SME financing practices, the share of small businesses using lease financing is smaller in other OECD countries than in Europe, though not marginal. For instance, according to the 2011 Survey on Financing and Growth of Small and Medium Enterprises by Industry Canada, 36% of Canadian SMEs reported some type of external financing, with 26% requesting debt, 8% trade credit, 7% leasing, 4% government financing and 2% equity.<sup>10</sup>

On the other hand, leasing appears to have played an important role in broadening SME access to finance in transition economies and emerging markets, as it was the case of the lending boom experienced by countries of Central and Eastern Europe over the last decade (EBRD, 2006). Haiss and Kichler (2009) estimate that, in 2006, across transition economies, leasing accounted for 7.9% of GDP, higher than the in EU-15, where on average leasing represented 4.7% of the GDP. The relevance of leasing in transition economies can be related to the bank lending sharp constraints for many SMEs, due to lack of collateral and limited track record, as well as to the restructuring process taking place in the banking sector of these economies (IFC, 1996; Beck et al., 2004).

USAID (2009) also notes that, largely due to improvements in the legal and regulatory environment for leasing, the leasing industry experienced spectacular growth in emerging markets during the 1990s, with medium-sized enterprises accounting for a relevant share of the activity.

## Policies to enhance asset-based finance for SMEs

### **Regulatory framework**

Policies to promote asset-based finance relate primarily to the regulatory framework, which is key to enable the use of a broad set of assets to secure loans in the case for asset-based lending, or to sell/assign specific assets to financiers, such as accounts receivables in the case of factoring and purchase order finance. Commercial laws that clearly define protection of a collateral lien are required. Also, the efficiency of the judicial and bankruptcy systems, including the length of time for bankruptcy, is critical for using assets to access credit. The power of collateral *ex ante* ultimately depends on whether the priority rights of secured lenders are upheld in bankruptcy *ex post* (Berger and Udell, 2006). In empirical work about institutions and bank behaviour in 20 transition economies, Haselmann and Wachtel (2010) find that collateral is the main trigger for creditors to lend to informationally opaque firms, and that the willingness to accept collateral depends on both the actual legal system and the perception by financiers of the legal environment. Hence, confidence in the operation of the legal system is as relevant as the laws enacted. Also, the broader the range of assets accepted as collateral, the more the banks appear to be willing to engage in lending that involves considerable asymmetric information.

According to Udell (2004) and Berger and Udell (2006), well-defined and strongly enforced laws on security interest partly explain the significant development of asset-based

lending in countries such as Australia, Canada, the United Kingdom and the United States. For instance, in the United States, under bankruptcy law, the judge is required to preserve the collateral claim of secured creditors and to give them “adequate protection” if the collateral or its proceeds are denied to the secured lender. Also, in the United States, an important role for the growth of the asset-based finance can be ascribed to the norms on “Secured Transactions” included in the US Uniform Commercial Code (UCC) and to a well-developed electronic registration system, which temporally defines lien filings.

These regulatory aspects have proven to be especially challenging for policies intended to develop asset-based lending, which demands a sophisticated and efficient legal system, in transition economies and emerging markets, as these generally present deficiencies in areas such as the scope of assets that can be secured, registration and filing, priority and enforcement (EBRD, 2003). In the 1990s, in most of the countries whose process of transition was supported by the EBRD, no rule on secured transactions existed, or rules were deemed outdated or inadequate, making it highly difficult for a lender to increase the chances of debt repayment by taking security over the borrower’s assets. A key element in EBRD’s support to economic reform, thus, has consisted in a “Model Law on Secured Transactions”, intended to: illustrate the principal components of a secured transactions law and the way in which they can be included in legislation; act as a reference point and checklist for the law reformer; provide guidance as to expectations of international investors and lenders; and harmonise the approach to secured transactions legislation.<sup>11</sup>

According to IFC (2010), the efforts made in overcoming the weaknesses in creditor rights during the period of transition, as well as the large market share of multinational banking groups that may have used leasing as a more secure way to provide financing to firms in riskier environments, may contribute to explain why the leasing sector developed more in Central and Eastern Europe than in other emerging regions.

In some countries, the development of asset-based instruments has been promoted through an explicit and coherent set of rules, to overcome the overall weak legal environment for secured transactions. This is the recent case of emerging countries, whose reforms aim at easing access to finance for SMEs and boosting trade. In India, a Factoring Regulation Bill was passed by the Parliament in 2011, which regulates the assignment of receivables in favour of a factor, and was expected to address, among other issues, the problem of delayed payments to micro and small firms by large companies.

### **Policy programmes**

Across OECD countries, active policies to support asset-based finance have received increasing attention, as governments seek to broaden the financing instruments available to businesses. Asset-based programmes are largely intended for businesses that are unable to meet credit standards associated with long-term credit. This is the case of the credit lines offered in the United States by the Small Business Administration (SBA), under the CAPLines programme, an umbrella programme that helps SMEs meet short-term and cyclical working capital needs. Two types of asset-based lending are offered: i) *Standard Asset-Based Line*, an asset-based revolving line of credit, which provides financing for cyclical growth, recurring and/or short-term needs. Repayment comes from converting short-term assets into cash, which is remitted to the lender. Businesses continually draw from this line of credit, based on existing assets, and repay as their cash cycle dictates. However, because these loans require continual servicing and monitoring of collateral,

additional fees may be charged by the lender; ii) *Small Asset-Based Line*, an asset-based revolving line of credit of up to USD 200 000, which operates like a standard asset-based line but with less strict servicing requirements, providing the business can consistently show repayment ability from cash flow for the full amount.<sup>12</sup>

New initiatives have been also launched more recently, as access to traditional bank lending became restricted in the aftermath of the global financial crisis and following regulatory reforms. This is the case of Japan, where the Bank of Japan (BOJ) in 2010 created a new line of credit to support asset-based lending, with the explicit aim to allow smaller firms, which do not have access to traditional lending under strict banking norms, better access to financing. Initially, the programme intended to provide up to Yen 3 trillion (USD 36.8 billion) in loans to private banks for up to four years, at a 0.1% interest rate, to lend to 18 high-growth sectors, including renewable energy and medicine. The BOJ later decided to lend up to Yen 500 billion specifically for equity investments and loans without real-estate collateral or guarantees, that is, asset-based lending. However, while loans to growth-sector firms neared the Yen 3 trillion ceiling in 2012, lending to equities and ABL only totalled about Yen 89 billion, well below the target limit.<sup>13</sup>

Policies have been aimed at strengthening longer-established instruments, such as leasing and factoring. For instance, in Europe, guarantees on lease have been included among the financing tools of the European Commission's Competitiveness and Innovation Framework Programme (CIP). Under the SME Guarantee Facility of the CIP, which provides loan guarantees to encourage banks to make more debt finance available to SMEs, the European Investment Fund (EIF) offers financial institutions with guarantees that cover part of the expected loss of a portfolio of new SME leases/loans. The instrument has proved useful in incentivising leasing providers to offer financing solutions to risk categories which were hitherto not approved, and thus cover new leasing volumes to SMEs and micro-enterprises (Kraemer-Eis and Lang, 2012).

In 2013, the Nordic Investment Bank (NIB), an international financial institution owned by eight countries,<sup>14</sup> signed a EUR 80 million loan agreement with private financial institutions for financing equipment leasing to the Norwegian SME sector.

In Japan, the Ministry of Environment (MOE) has been subsidising leasing businesses to support diffusion of low carbon-emitting and energy-saving equipment at households and SMEs, which may find it difficult to cover the high initial investment costs. Under the "Eco-Lease Promotion" programme, launched in 2011, the MOE provides corporations 30% of the total lease fee for leased equipment to generate and use renewable energies.

In other countries, public measures intended to foster leasing were discontinued after evaluating that the market could meet SME capital leasing needs. This is the case of Canada, where, in 2002, a capital leasing pilot project was launched by Industry Canada, with the objective of testing the viability and utility of the established Canada Small Business Financing Program for this financing tool. However, over the five-year timespan of the project, only 1 500 leases worth CAD 136 million were registered. This uptake was less than 7% of expected activity. At the same time, Statistics Canada's *Survey on Financing and Growth of Small and Medium Enterprises* showed that, in 2007, 17% of Canadian SMEs sought capital lease and, of these firms, 92% had their application authorised. It was then deemed that the vast majority of Canadian small business' capital leasing needs are being met in the marketplace without government assistance, and the pilot project was discontinued in 2007.<sup>15</sup>

Among asset-based instruments, factoring has been supported as a means to ease SMEs' access to finance and promote their inclusion in value chains. In Mexico, in 2001, Nacional Financiera (NAFIN), a state-owned development bank, launched the "Production Chains Programme", which offers SMEs on-line factoring services (Box 3.2).

**Box 3.2. NAFIN's Production Chains Programme:  
Reverse factoring and supply chain building**

The Production Chains Programme, launched by Nafin, Mexico's state-owned development bank, in 2001, allows small suppliers to use their receivables from large buyers to receive working capital financing. Under a typical reverse factoring scheme, a SME can access more and less expensive financing by transferring the credit risk to high quality customers. NAFIN does not factor receivables directly, but rather coordinates factoring services through an electronic platform. It requires all the factoring services it brokers to be offered without additional collateral and service fees. Two types of factoring are offered under the programme: i) factoring without recourse, at a maximum interest rate of 4% above the interbank rate, and ii) contract financing, which funds up to 50% of confirmed contract orders from large buyers, at a fixed rate.

Beside its role as a broker, NAFIN also provides financial training and assistance to SMEs. Furthermore, the platform mechanism, whereby suppliers are grouped in "chains" to large buyers, allows large firms to strengthen their relations with suppliers, and allows SMEs to build up a credit history, which may help them access bank lending. A unique feature of the programme is that nearly all services are provided electronically, which reduces time and labour costs, and improve security. In addition, as the platform allows all commercial banks and SMEs to participate, it gives both national reach to regional banks and access to national financing networks to rural firms. Furthermore, it favours competition of multiple lenders for factoring suppliers' receivables.

As of mid-2009, the programme comprised 455 large buyers, more than 80 000 SMEs and about 20 domestic lenders, including banks and independent finance companies, and had extended over USD 60 billion in financing.

*Source: Klapper (2006), IFC (2010).*

Other forms of asset-based finance, such as Purchase Order Finance and Warehouse Receipts, have received increasing attention in emerging economies, where international organisations and donors have been actively promoting projects intended to foster supply chain finance, as well as to develop stabilisation mechanisms in commodity markets. This is the case of programmes launched by USAID, which, based on the successful experience with these asset-based instruments in the United States, has introduced them in emerging markets such as Armenia, Azerbaijan, Bolivia, Kosovo, Macedonia, Moldova, and South Africa, both through banks and specialised non-banking financial institutions (USAID, 2009). Box 3.3 illustrates the case of a POF pilot project in Bolivia.

### Box 3.3. USAID pilot project for Purchase Order Finance in Bolivia

In 2005, the USAID-funded Rural Competitiveness Activity (ARCo) initiated operation to improve licit productive activities and access to financial services in coca-growing Yungas and Chapare regions of Bolivia. After conducting supply- and demand-side analysis of the local financial sectors, to understand SME finance needs and available services, ARCo identified Purchase Order Finance (POF) as a potentially valuable instrument to tackle the main financial challenges for local producers. It selected FIE, a private financial fund and a leading microfinance institution in Bolivia, to implement the POF pilot project. The agreement with FIE included a small subsidy to start operations and technical assistance to train staff. FIE committed to use its own funds for the loan pool and issued USD 2.5 million in POF credits over two years.

One of the first operations under the programme, in 2007, involved a transaction between Cooperativa Agropecuaria Integral Noreste, a 260-member association of small coffee producers, and A. Van Weely BV, a Dutch-trading company specialised in organic food. This latter had issued a purchase order for a full container of washed Arabic organic Bolivian coffee, but Integral Noreste needed financing to process and ship the order. FIE issued a USD 30 000 POF loan to Integral Noreste for 90 days at 12% annual rate. This allowed Integral Noreste to purchase coffee beans from producers and for post-harvest packaging. Integral Noreste transferred its accounts receivable to the buyer, which kept control of the funds and paid suppliers for bills incurred by the cooperative, without imposing other fees or requesting collateral. The POF loan allowed Integral Noreste to pay its suppliers upon delivery of the coffee, which created greater incentive for members to sell their coffee to the cooperative, as previously Integral Noreste could pay them only after it received payment from the buyer, usually three to four months after delivery.

Source: Ortega (2008); USAID (2009).

### Notes

1. The UCC filing is a public document that informs all other lenders and creditors that a specified collateral is secured. The so-called UCC-1 filing specifies the types of assets being secured. Often, firms have several UCC-1 financing statements filed against them, each mentioning a specific asset. Lenders that want to secure their loan with all the firm's assets file "blanket" UCC-1 statements. Once the firm pays off the secured loan, it can request that the lender terminates its UCC-1 filing (see [www.dandb.com/credit-resources/business-management/what-you-need-to-know-about-ucc-filings](http://www.dandb.com/credit-resources/business-management/what-you-need-to-know-about-ucc-filings)). The establishment of the UCC has made it possible to put a lien on any kind of property. As Clarke (1996) describes, before the creation of the UCC, in 1952, there was no standardised way to place a lien on a company's inventory, equipment or finished good and, to obtain warehouse financing, a firm would need to physically move an asset into the lender's warehouse.
2. See [www.ifgroup.com/files/customer/images/Articles/History%20of%20Factoring.pdf](http://www.ifgroup.com/files/customer/images/Articles/History%20of%20Factoring.pdf).
3. International Accounting Standard for Leasing (IAS 17).
4. See [www.leaseurope.org](http://www.leaseurope.org).
5. See [www.cfa.com/eweb/upload/CFA%20Version%20-%20ABL%204Q%202011%20Quarterly%20Index.pdf](http://www.cfa.com/eweb/upload/CFA%20Version%20-%20ABL%204Q%202011%20Quarterly%20Index.pdf).
6. See [www.pwc.co.uk/assets/pdf/restructuring-trends-growth-of-asset-based-lending.pdf](http://www.pwc.co.uk/assets/pdf/restructuring-trends-growth-of-asset-based-lending.pdf).
7. See [www.cfla-acfl.ca](http://www.cfla-acfl.ca).
8. The International Factors Group comprises more than 160 members from the factoring industry across more than 50 countries. It was founded in 1963 as the first international association of factoring companies (see [www.ifgroup.com](http://www.ifgroup.com)).
9. The study is based on a survey of about 3 000 SMEs in eight European countries (France, Germany, Italy, the Netherlands, Poland, Sweden, Spain and the UK).



10. See [www.ic.gc.ca/surveys](http://www.ic.gc.ca/surveys).
11. See [www.ebrd.com/pages/sector/legal/secured.shtml](http://www.ebrd.com/pages/sector/legal/secured.shtml).
12. See [www.sba.gov](http://www.sba.gov).
13. See <http://online.wsj.com/article/SB10001424052970204276304577264763230389428.html>.
14. Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden.
15. See [www.ic.gc.ca/eic/site/csbfp-pfpec.nsf/eng/la03016.html#a4\\_3](http://www.ic.gc.ca/eic/site/csbfp-pfpec.nsf/eng/la03016.html#a4_3).

## References

- Beck, T. and A. Dermirguc-Kunt (2006), "Small and medium-size enterprises: Access to finance as a growth constraint", *Journal of Banking and Finance*, Vol. 30, Issue 11, pp. 2931-43.
- Beck, T., A. Dermirguc-Kunt and V. Maksimovic (2004), "Financing patterns around the world: the role of institutions", *World Bank Policy Research Working Paper*, No. 2905, World Bank, Washington, DC.
- Benchaya, G. and G. Anderson (2010), "The true face of dilution", *ABF Journal*, January/February, <http://abfjournal.com/articles/the-true-face-of-dilution-part-i/>.
- Berger, A.N. and G.F. Udell (2006), "A more complete conceptual framework for SME finance", *Journal of Banking & Finance* 30, pp. 2945-66.
- Caouette, J.B., E.I. Altman, P. Narayanan and R. Nimmo (2008), *Managing credit risk: The great challenge for global financial markets*, Second Edition, John Wiley & Sons, Inc., Hoboken, New Jersey.
- Clarke, P.S. (1996), *Asset-Based Lending: The Complete Guide to Originating, Evaluating, and Managing Asset-based Loans, Leasing and Factoring*, Irwin Professional Publishing, Chicago.
- Davidson, P. (1986), "Finance, Funding, Saving, and Investment", *Journal of Post Keynesian Economics*, Vol. 9, No. 1, Autumn, pp 101-110.
- EBRD (2003), *Transition Report 2003*, European Bank for Reconstruction and Development, London.
- EBRD (2006), *Transition Report 2006*, European Bank for Reconstruction and Development, London.
- EC (2014a), *Final report from the Expert Group on Intellectual Property Valuation*, European Commission, Directorate-General for Research and Innovation, Bruxelles, [http://ec.europa.eu/research/innovation-union/pdf/Expert\\_Group\\_Report\\_on\\_Intellectual\\_Property\\_Valuation\\_IP\\_web\\_2.pdf](http://ec.europa.eu/research/innovation-union/pdf/Expert_Group_Report_on_Intellectual_Property_Valuation_IP_web_2.pdf).
- EC (2014b), *ECB-EC Survey on the access to finance of enterprises (SAFE). Analytical Report 2014*, European Commission, DG Enterprise and Industry, Brussels.
- Ellis, I. and K.P. Jarboe (2010), "Intangible assets in capital markets", *Intellectual Asset Management Magazine*, May/June 2010, [www.athenaalliance.org/pdf/IAM\\_41\\_IntangibleAssets.pdf](http://www.athenaalliance.org/pdf/IAM_41_IntangibleAssets.pdf).
- FCI (2013), *How does International Factoring work?*, Factors Chain International, [www.fci.nl](http://www.fci.nl) (accessed on July 2013).
- FCI (2015), *Total Factoring Turnover Country*, Factors Chain International, [www.fci.nl](http://www.fci.nl) (accessed on July 2015).
- Gallardo, J. (1997), "Leasing to Support Small Businesses and Microenterprises", *World Bank Policy Research Working Paper* 1857, Washington, DC.
- GE Capital (1999), *Guide to Asset Based Lending*, GE Capital Commercial Finance Inc., General Electric Capital Corporation.
- Haiss, P. and E. Kichler (2009), "Leasing credit and economic growth. Evidence for Central and South Eastern Europe", *EI Working Papers/ Europainstitut* 80, Europainstitut, WU Vienna University of Economics and Business, Vienna.
- Haselmann, R. and P. Wachtel (2010), "Institutions and Bank Behavior: Legal Environment, Legal Perception, and the Composition of Bank Lending", *Journal of Money, Credit and Banking*, Vol. 42, No. 5.
- Höllinger, F., L. Rutten and K. Kiriakov (2009), "The use of warehouse receipt finance in agriculture in transition countries", *FAO Investment Centre Working Paper*, Food and Agriculture Organization, Rome, [www.ruralfinance.org/fileadmin/templates/rflc/documents/The\\_use\\_of\\_warehouse\\_pdf.pdf](http://www.ruralfinance.org/fileadmin/templates/rflc/documents/The_use_of_warehouse_pdf.pdf).
- ICC (2012), *Rethinking Trade and Finance*, ICC Global Survey on Trade Finance 2012, International Chamber of Commerce.

- IDB (2012), *Banks and SMES: Raising the Game: 4th Regional Survey in Latin America and the Caribbean*, Inter-American Development Bank, Washington, DC, [www.iadb.org/en/publications/publication-detail,7101.html?id=30486](http://www.iadb.org/en/publications/publication-detail,7101.html?id=30486).
- IFC (1996), *Leasing in Emerging Markets, Lessons of Experience Series*, International Finance Corporation, Washington, DC.
- IFC (2010), *Scaling-Up SME Access to Financial Services in the Developing World*, G20 Seoul Summit 2010, [www.ifc.org/wps/wcm/connect/bd1b060049585ef29e5abf19583b6d16/ScalingUp.pdf?MOD=AJPERES](http://www.ifc.org/wps/wcm/connect/bd1b060049585ef29e5abf19583b6d16/ScalingUp.pdf?MOD=AJPERES).
- Jung, J. and J. Tamisiea (2010), "Monetizing Intellectual Property: Royalties, Revenues and Alternative Sources of Capital", *Pharmaceutical Commerce*, 10 April 2010, [www.pharmaceuticalcommerce.com/index.php?pg=business\\_finance&articleid=1999&keyword=IP-intellectual%20property-royalty-McDermott-Will-Emery](http://www.pharmaceuticalcommerce.com/index.php?pg=business_finance&articleid=1999&keyword=IP-intellectual%20property-royalty-McDermott-Will-Emery).
- Klapper, L. (2006), "The Role of Factoring for Financing Small and Medium Enterprises", *Journal of Banking & Finance*, Volume 30, Issue 11, pp. 3111-30.
- Kraemer-Eis, H. and F. Lang (2012), "The importance of leasing for SME finance", *Working Paper 2012/15*, EIF Research & Market Analysis, European Investment Fund, Luxembourg.
- Lasfer, M.A. and M. Levis (1998), "The Determinants of the Leasing Decision of Small and Large Companies", *European Financial Management*, Vol. 4, Issue 2, pp. 159-184.
- Maselli, J. (2000), "Using purchase order financing to complement senior lending", *Commercial Lending Review* 1999-2000, pp. 57-60.
- Migliero, S. (2012), "Getting to yes when banks say no. Bifurcated collateral loans provide incremental liquidity", *Abf Journal*, September 2012.
- Milenkovic-Kerkovic, T. and K. Dencic-Mihajlov (2012), "Factoring in the changing environment: legal and financial aspects", *Procedia – Social and Behavioral Science* 44, pp. 428-435.
- Nuccio, M.V. and R.R. Loewy (2013), "Basel III: Impact on Asset-Based Lending", *abfjournal*, Vol. 11, No. 1, Jan./Feb. 2013, pp. 28-29, <http://abfjournal.com/articles/basel-iii-impact-on-asset-based-lending>.
- OECD (2012), *Entrepreneurship at a Glance 2012*, OECD Publishing, Paris, [http://dx.doi.org/10.1787/entrepreneur\\_aag-2012-en](http://dx.doi.org/10.1787/entrepreneur_aag-2012-en).
- Ortega, R. (2008), *Value Chain Financing in Rural Bolivia: Introducing Purchase Order Financing*, paper presented at the Innovations in Financing Value Chains Competition, USAID, December 2008.
- Oxford Economics (2011), *The use of leasing amongst European SMEs*, Report prepared for Leaseurope, November 2011.
- Slotty, C. (2009), "Financial constraints and the decision to lease: Evidence from German SME", *Fachbereich Wirtschaftswissenschaften Finance & accounting* No. 205, Working Paper Series, Johann-Wolfgang-Goethe-Universität Frankfurt am Main, [www.econstor.eu/bitstream/10419/39049/1/609306316.pdf](http://www.econstor.eu/bitstream/10419/39049/1/609306316.pdf).
- Smith & Howard (2013), *Fundamentals of Asset Based Lending*, Smith & Howard Certified Public Accountants and Advisers, [www.smith-howard.com/resources/articles\\_detail.asp?id=145](http://www.smith-howard.com/resources/articles_detail.asp?id=145).
- Smith, J.K. and C. Schnucker (1994), "An empirical examination of organizational structure: The economics of the factoring decision", *The Journal of Corporate Finance* 1(1): 119-138.
- Soufani, K. (2001), "The role of factoring in financing UK SMEs: A supply side analysis", *Journal of Small Business and Enterprise Development*, Vol. 8, Issue 1, pp. 37-46.
- Udell, G.F. (2004), *Asset-Based Finance*, Commercial Finance Association, New York.
- USAID (2009), "Enabling Small and Medium-Sized Enterprise Access to Finance", FS Series No. 4, USAID Financial Sector Knowledge Sharing, United States Agency for International Development.
- van der Vliet, K., M.J. Reindorp and J.C. Fransoo (2013) "Supply Chain Finance: A conceptual framework to advance research", *Beta Working Paper Series* 418, School of Industrial Engineering, Eindhoven University of Technology, Netherlands.



**From:**  
**New Approaches to SME and Entrepreneurship Financing**  
Broadening the Range of Instruments

**Access the complete publication at:**  
<https://doi.org/10.1787/9789264240957-en>

**Please cite this chapter as:**

OECD (2015), "Asset-based finance for SMEs", in *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264240957-6-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).