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Global Agenda Council on the Future of Financing & Capital

The Future of FinTech
A Paradigm Shift in Small Business Finance

October 2015

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Foreword

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Small and medium sized enterprises (SMEs) are often cited as the major driver of economies and a force in job creation, but they still have difficulty securing proper financing to prosper.

The global financial crisis of 2007-2008, coupled with higher regulation and capital costs for loans to SMEs, has made it even more difficult for SMEs to secure financing. However, the financial crisis has also created a plethora of disruptors in the FinTech area ("FinTech", a contraction of "finance" and "technology", is defined as the use of technology and innovative business models in financial services) who, with their innovative ways to originate, assess credit risk and fund SME loans, have provided alternative ways for SMEs to secure funding for their growth.

Over the last year, the Global Agenda Council on the Future of Financing & Capital, formed of industry leaders, academics, finance ministers and central bankers, has tackled the question of the lack of financing for SMEs, although ample cash is ready to be deployed.

This report synthesizes the authors' efforts to take stock of what the finance industry has provided to date and how the FinTech industry has taken over some of the funding with its innovative business models and products.

On behalf of the World Economic Forum and the Global Agenda Council on the Future of Financing & Capital, we wish to thank all who have contributed their time and expertise to this report, particularly Arnaud Ventura and Peter Tufano, who led this work stream, and Daniel Drummer, who led the research and editing of this work. We hope the report proves to be insightful and a helpful reference in your quest to understand how disruptors in the FinTech industry are providing alternative ways of funding for SMEs.

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Innovation tends to challenge and sometimes displace traditional sectors and practices. The printing press, internal combustion engine, and computer are all examples of technological innovations that transformed societies and economies. In the last 15 years and with the creation of a connected world, tech-led innovations are challenging established industries. For example, structural upheaval is happening in sectors such as hospitality or transport with players such as Airbnb and UBER.

While the last three decades of financial innovation have already led to massive changes in financial services, we believe that a new wave of innovation will continue to transform the industry. Innovation, through what has been called FinTech, is already disrupting the ways financial services are being offered, promising to provide access to underserved markets in new ways.

Considering the importance of small and medium sized enterprises – and their need for funding – we focus on this particular aspect of FinTech in this report. We hope that innovations in this field – and others in payments, wealth management and elsewhere – will make a lasting contribution to the creation of a better and more stable world.

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A special thanks goes to all participants who provided input, guidance and opinions in the course of creating this report, as depicted in Figure 1.

Figure 1: Interviews Conducted

Executive Summary

Small and medium sized enterprises (SMEs) are a major, yet often overlooked driver of the world economy. They account for more than half of the world's gross domestic product (GDP) and employ almost two-thirds of the global work force.[1]

However, around the globe, SMEs often have one **major pain point – dealing with their finances** and ensuring appropriate funding. As reported by the International Financial Corporation (IFC), a "funding gap" of more than $2 trillion exists for small businesses in emerging markets alone.[2]

Reasons for this issue are manifold: the finances of SMEs are characterized by **high complexity, yet are low scale**. For traditional lenders such as banks, extending credit to small businesses is often too costly, given the small loan size. Driven further by regulation, banks have reduced their exposure to smaller businesses in recent years. Internally, small businesses often lack the skills and resources to handle finance in a sophisticated manner and to conduct systematic fundraising.

Acknowledging the importance of small businesses, **governments, state agencies and international organizations** have made many attempts to improve the situation. Measures include government guarantees, direct government lending, supporting SME banks or driving the implementation of credit bureaus. While some of those efforts have shown positive results, a vast funding gap still remains.

In recent years, **FinTech** – a contraction of "finance" and "technology", and defined as the use of technology and innovative business models in financial services – has become a powerful trend. From 2013 to 2014, equity investment into FinTech companies has quadrupled from $4 billion to more than $12 billion.[3]

This trend has the potential to become a game changer for small businesses. Because FinTech solutions are efficient and effective at lower scale, small businesses will be one of the main beneficiaries of FinTech's disruptive power.

FinTech embodies a **new set of products** tailored to the needs of small businesses. These include marketplace ("peer-to-peer") lending, merchant and e-commerce finance, invoice finance, online supply chain finance and online trade finance.

A **global phenomenon** for small businesses, FinTech has rapidly emerging new players across developed and growth markets. Some innovative business models are seen in emerging markets first and may spread to the rest of the world over subsequent years.[4]

Several **enabling factors** are critical to ensure rapid growth, with the availability of data, a supportive regulatory environment, the provision of sufficient investor capital and financial education among the most relevant.
While FinTech's impact is expected to be powerful, several **risk factors** need to be taken into account, on the micro and macro levels. Risks include limited protection of retail investors, the potential extension of funding to unworthy borrowers, but also systemic risk following from a partly unregulated and opaque sector.

The **overall potential of FinTech** for small business and thus for the economy as a whole seems tremendous. Opportunities exist for national governments, development finance institutions, entrepreneurs and investors to support and, at the same time, benefit from this trend. Incumbents have the option to cooperate with new players, innovate from within or strategically acquire companies.

While the pace of change is still unclear, the potential magnitude of FinTech as a catalyst for growth is hard to deny. The current momentum is not expected to vanish any time soon.

Small Business Finance Is a Global Issue Worth Addressing

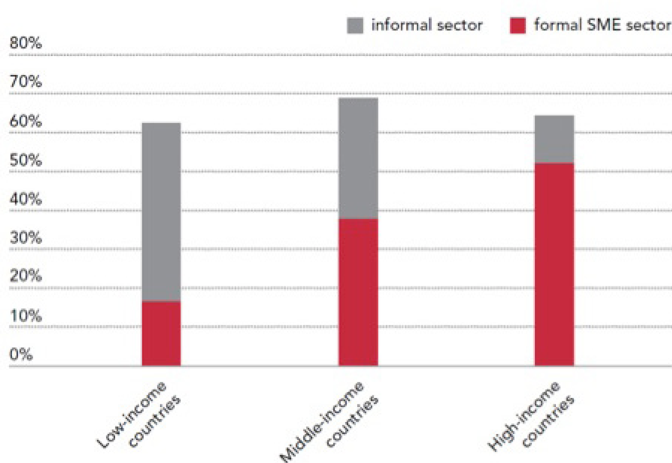
Small businesses and entrepreneurs play a major role in the world economy

Small and medium sized enterprises (SMEs) are a major driver of economic activity in most developing and developed economies. Precise numbers are hard to establish as the global database is fragmented and definitions of SMEs vary.[5]

The global number of SMEs is hard to estimate. The best approximation was established jointly by McKinsey & Company and the IFC. In emerging markets alone, 365 million to 445 million micro, small and medium-sized enterprises exist, out of which 25 million to 30 million are formal SMEs and 55 million to 70 million are formal micro-enterprises, while the rest (285 million to 345 million) are informal enterprises and non-employer firms.[6] In developed markets, approximately 100 million formal SMEs exist.

As a reliable indication, formally registered SMEs account for more than half of the GDP of high-income countries (see Figure 2). The impact is even higher if also taking into account "informal" small businesses.

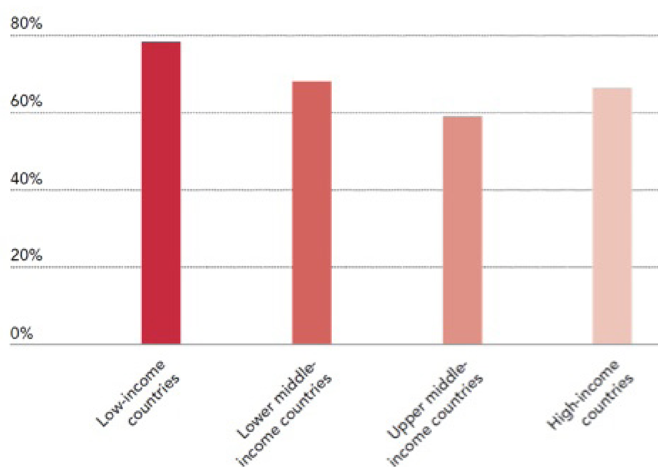
Figure 2: Share of SMEs in Global GDP



Source: Edinburgh Group 2013; median value, based on European Investment Bank data

Start-ups and entrepreneurial companies drive innovation and technological advances, leading to progress and higher productivity in the long run. Small businesses are also a major driver of employment (see Figure 3). A World Bank analysis across 99 countries revealed that firms with between 5 and 250 employees accounted for 67% of the total permanent, full-time employment.

Figure 3: Contribution of SMEs to Employment



Source: Edinburgh Group 2013; median value, based on World Bank data

SMEs, especially high-growth companies ("gazelles"), were creating more jobs than large enterprises. Between 2002 and 2010, on average, 85% of total employment growth was attributable to small businesses.

SME finance is different

Finance is a key component of every company's business activity. The idiosyncratic features of finance for small businesses can be summarized as **high complexity and low scale**. Small businesses and large corporates have to deal with many of the same issues, such as securing long-term funding, managing working capital, handling late payments, dealing with international customers and taking care of collections.

Yet many small businesses and entrepreneurs lack the resources to employ a dedicated team. Often the burden of managing finances remains with the management team or the founders. Securing financing is rarely a core strength of any small business. In a recent UK survey, SMEs named "accessing external finance" as their poorest area of expertise, falling sharply behind all other capabilities, including people management, managing taxes or introducing new products.[7]

Banks are the major provider of funds

Besides friends and family, **banks** have traditionally been the most important provider of capital to small businesses. Turning to a bank to apply for a loan is the natural step for most small businesses in search of funding.
In most developed markets, SMEs also rely on **credit card funding** for short-term liquidity needs**.** For one-third of small businesses this includes business credit cards. Even more, half of all micro businesses in the US also use the personal credit limit of the owner.[8] While this seems like a convenient way to access funding, it is also very expensive, given the high interest charged.

Lending to SMEs can be a profitable business

In the **US**, bank debt accounts for more than $580 billion of SME funding,[9,10] followed by credit card debt of about $200 billion.[11] All other funding sources fall far behind. Small businesses with revenues of more than $500,000 per year account for **20-30% of all credit revenues of banks**. In the US, banks generate an after-tax profit from SME lending of $10 billion to $15 billion per year.[12]

In emerging markets, banking revenues with small businesses will total more than $360 billion in 2015, according to McKinsey estimates. This represents a compound annual growth rate of 20% from 2010 to 2015.[13]

Funding for small businesses is often severely constrained

As already described, most small businesses turn to bank financing to fund their operations. However, lending by banks is often limited because understanding small businesses requires more time and expertise than the more standardized consumer business. At the same time, the traditional relationship-based corporate banking model is costly to operate in dealing with small business, given the smaller loan size.
Further, **information asymmetry** as a result of the lack of supporting financial information infrastructure limits the ability to lend. Small businesses often lack the required data, such as a history of audited statements for a bank to appropriately assess its cash flow situation.
More generally, the **high intrinsic** risk of SMEs often exceeds banks' risk appetite. This hesitation is further amplified by **regulation**, such as Basel III, which imposes higher capital requirements for (riskier) small business loans, compared to loans extended to states or home owners.
Over past years, banks have thus further decreased their lending exposure to SMEs while the costs of borrowing have increased for SMEs. In the US, SME loans as a percentage of all bank business loans fell from 35% to 24%. In the Eurozone, borrowing costs for SMEs as spread over larger loans increased by 150%.[14]

The credit gap: many SMEs do not have appropriate access to debt funding

Based on IFC data, 45-55% of SMEs worldwide do not have a loan overdraft, but would need one. While 21-24% have a loan, they are still significantly financially constrained.[15] Globally, another $2.38 trillion in demand for credit exists, based on IFC data. In the US, 44% of SMEs received "none" of the bank credit they applied for.[16] In the UK, the funding gap for SMEs is estimated to be up to £59 billion. Based on a recent government initiated survey, about 30% of British SMEs did not obtain the funding they had tried to obtain.[17]

In other developed countries, such as the Nordics in Europe, most SMEs seem to be sufficiently funded – as of now. At the same time, they are heavily bank-dependent. In Sweden, for instance, more than 80% of small business funding stems from banks.[18] If banks need to adhere to stricter capital requirements, they may be forced to reduce their small business lending. SMEs would then be left without much choice in a rather small national market lacking liquidity.

In developing countries, limited access to finance is already the second-most cited obstacle for businesses, right after unstable electricity.[19] Of micro and small business, 40% are completely unserved and a further 10% are underserved. As a result, the lack of access to finance is a major constraint for about 25% of micro and small businesses, affecting a labour force of over 500 million people employed in these enterprises.[20]

Attempts at resolution have only partly succeeded

For many years, governments, non-governmental and international organizations have pursued and partly implemented several initiatives to support and enhance SME financing, including:[21]
Government loan guarantees (e.g. the Small Business Administration in the US)
Provision of direct credit by state-owned banks (e.g. the British Business Bank)
Initiatives to lighten Basel III/capital requirements for SME loans

- Tax incentives to provide capital to SMEs
- Initiatives to facilitate direct underwriting of alternative lenders (e.g. insurance companies, asset managers)
- Institutional exchanges (e.g. SME covered bonds, SME stock markets)
- Initiatives to strengthen securitization markets
- Attempts to support private placement markets

Despite all efforts, a significant funding gap has remained.[22]

The Opportunity: FinTech as a Game Changer for SME Finance

FinTech has become a powerful trend

FinTech has become a frequently used term, referring to companies that provide or facilitate financial services by using technology. In its current form, FinTech is marked by technology companies that disintermediate formal financial institutions and provide direct products and services to end users, often through online and mobile channels.[23]

New players tend to focus on a **single-purpose solution**, designed to offer an improved experience in just one product or service. Compared to large financial institutions that are often slowed down by legacy processes, old systems and an inert culture, nimble start-ups are able to drive more radical innovation, as they are often able to start "from a clean slate".

The FinTech space has gained significant traction in recent years. Global investment more than tripled in 2014, reaching an investment volume of more than $12 billion.[24] This compares to the total spending by banks worldwide on information technology (IT), which was estimated to equal $215 billion for 2014, including hardware, software, internal and external IT services.[25]

Lending is a major subsector of FinTech

Of the total investment in FinTech, 27% has gone into consumer lending and 16% into business lending.[26] Consumer lending companies include Zopa, Lending Club and SoFi, while companies such as OnDeck or MarketInvoice lend primarily to small businesses.

Equity funding: In addition to debt funding, online crowdfunding platforms such as Seedrs, Crowdcube or OurCrowd connect companies and investors that want to contribute to the funding of small businesses or start-ups by providing some form of equity capital.

Money transfer: Money transfer services provided by banks and brokers were the only means available to complete money transfers before FinTech providers began appearing. Companies such as WorldRemit, Kantox or CurrencyFair offer international money transfer and foreign exchange services that engage advances in technology, leading to faster and cheaper solutions.

Mobile payments: Allowing people to conduct transactions through their mobile phone or tablets, FinTech companies such as M-Pesa (Kenya) or EcoCash (Zimbabwe) are challenging incumbents with innovation in mobile payments. In the long run, blockchain technology aims to revolutionize the very concept of money itself.

Trading platforms: FinTech providers in the capital market space have risen in popularity. On platforms such as eToro, retail investors can source information and invest directly into a range of asset classes. "Robo-advisers", such as Nutmeg, Betterment and Wealthfront, invest money automatically based on preset parameters.

Much attention has been paid to the effects of FinTech on consumers (business to consumers)

The first prominent FinTech success stories, such as Zopa, Transferwise, Simple or Lending Club, were all catering to the consumer segment. Venture capitalists often favoured business-to-consumer (B2C) FinTech firms, given that scaling up seemed easily achievable. Recently, the business-to-business (B2B) segment has received increasing attention. In the coming years, significant potential may be unleashed in this segment as large pools of revenue have remained untapped.

FinTech has the potential to become a game changer in the funding of small businesses

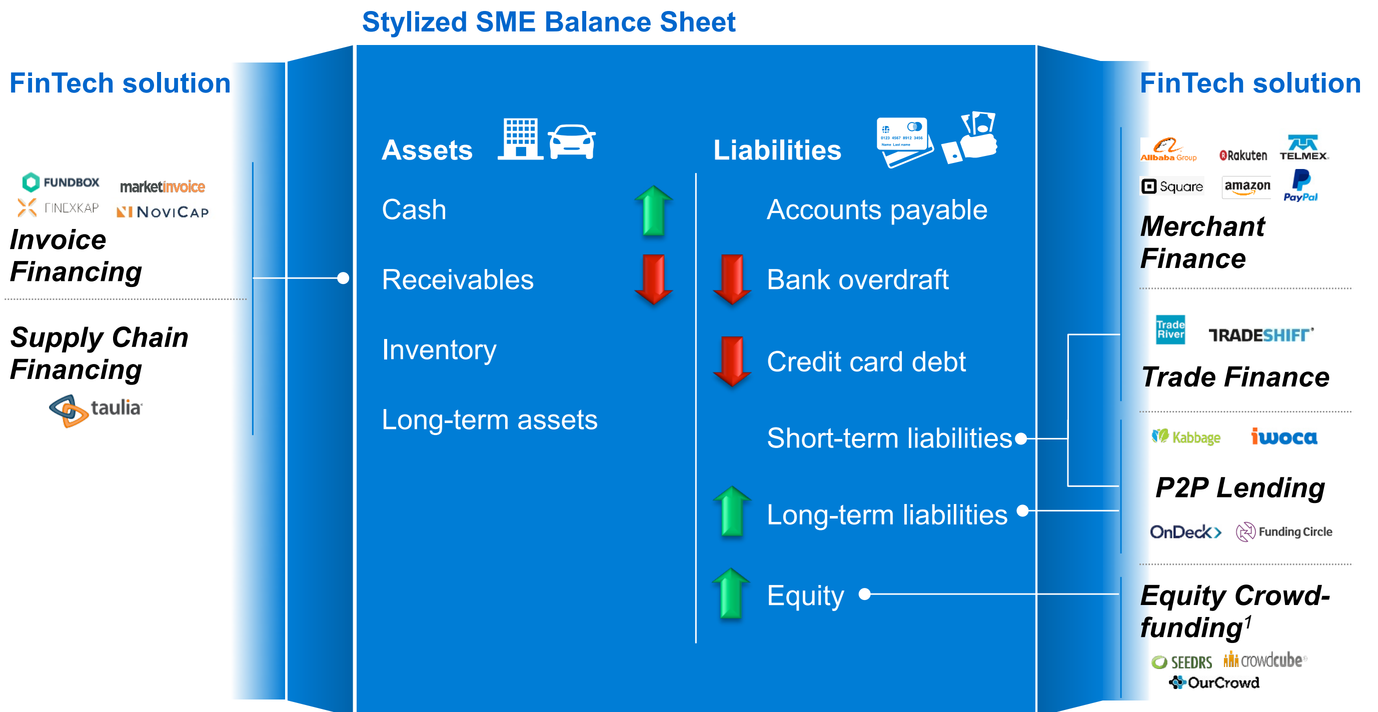
Appropriate access to funding remains one of the most critical ingredients for the success of SMEs. Over the past few years, a number of products and business models have emerged, catering to the needs of small businesses.

In that time, financial technology has provided core innovations with the potential to significantly increase small businesses' access to finance. While the boundaries are sometimes fluid, five key products for funding small businesses are highlighted in this report:

1. Marketplace (peer-to-peer) lending
2. Merchant and e-commerce finance
3. Invoice finance
4. Supply chain finance
5. Trade finance

Taken together, employing these solutions can have enormous positive effects on an SME's balance sheet situation, leaving small businesses with more cash, improved working capital management, and more stable and secure funding (see Figure 4).

Figure 4: Stylized SME Balance Sheet and the Impact of FinTech Solutions



[1] Not detailed in this report

Source: Authors

a. Marketplace (peer-to-peer) lending

Introduction

Since the first platform launched in 2005, marketplace or peer-to-peer (P2P)[27] lending has become a global market with a multitude of different business models and high-projected future growth rates. Generally, marketplace lending refers to the practice of lending money to borrowers without going through a traditional financial intermediary such as a bank.

The FinTech solution

Marketplace lenders aim to provide a solution where banks are unable to do so. This is because of a number of **idiosyncratic factors in their operating model**.

First, **unsecured lending** is the most common form of marketplace lending to date. As such, no collateral is required. Small businesses benefit especially from this, particularly in the service sector. Often, such businesses have rather stable cash flows but no tangible collateral that banks could lend against.

Second, marketplace lenders do not fund themselves with insured and highly regulated depositor money. Instead, they source funds from retail or institutional **investors with a higher risk appetite** (see later).

Third, marketplace lenders apply **innovative credit scoring models.** Such models are heavily data-driven, employ semi-automated risk assessment methods and leverage nontraditional data points. Sources can range from a business's rating on online platforms such as Yelp, the owner's social network on LinkedIn or satellite data to assess the level of wealth in a particular area. This allows for assessing credit risk where banks have traditionally not been able to do so, especially in markets with limited credit bureau information. In contrast to consumer marketplace lending, however, underwriting almost always still involves some degree of human decision-making.

A fourth factor is that FinTech providers operate with a **lean operational set-up**, maintaining no branches and less personnel to make underwriting decisions. They can therefore offer loans at competitive rates or have some cushion for credit losses at the potentially higher level of risk that they underwrite.

Finally, marketplace lenders do not attract the same **level of compliance**, regulatory obligations and capital requirements as their brick-and-mortar counterparts, which makes up a not negligible part of their competitive edge.

Market overview

Compared to total bank lending to SMEs of $14 trillion to $18 trillion, **SME marketplace lending** is still limited in size and scope.[28] Globally, marketplace lending accounted for $60 billion to $70 billion in outstanding loan volumes in 2014.[29] Countries with the highest SME marketplace lending volumes include China, the US and the UK. Yet, other geographies around the world have recently been catching up. (For a graphic representation of countries with significant volumes, see Figure 5.)

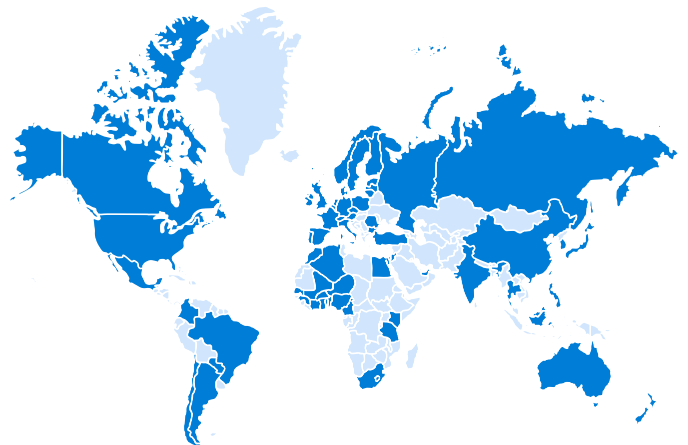
Since 2014, **China** has been the country with the highest volume of loans issued through marketplace lenders. Based on estimates, the outstanding marketplace loan volume exceeded RMB 250 billion (Chinese renminbi), or $40 billion, in 2014, with the number of marketplace platforms rising to an astonishing 1,575 platforms, compared to only 20 in 2011.[30]

The **US** reported $5 billion in new SME lending issued on marketplace platforms in 2014, while a volume of $12 billion is projected for 2015. The most relevant issuers in 2014 included OnDeck ($1.2 billion), CAN Capital ($1 billion), Kabbage ($400 million), Merchant Cash & Capital ($277 million) and Strategic Funding ($200 million).[31]

This leaves significant potential still untapped. According to Morgan Stanley and Goldman Sachs estimates, an addressable market of about $180 billion of SME loans could be taken by marketplace lenders. An annual SME loan volume of $47 billion may be reached in 2020, which will account for 16% of total SME loan issuance.[32]

In the **UK**, $2.5 billion was issued by SME marketplace lenders in 2014, with $4.4 billion projected for 2015. The UK market is more fragmented with more than 40 different platforms operating. The largest originators include RateSetter ($457 million), Funding Circle ($432 million) and LendInvest ($236 million).[33]

Figure 5: Distribution of Marketplace Lending



Note: only countries with significant volumes are highlighted.
Source: Lending Club 2015; Team analysis

In some African countries, SME marketplace lending is gradually picking up. In Kenya, Ghana, Tanzania and Zambia, lenders such as afb have started to issue loans to formal and informal SMEs, starting from loan amounts as low as $100. In the francophone parts of Africa, the company Microcred is among the pioneers.

According to estimates, **60-80 countries** now have at least one marketplace platform operating or lined up to launch within the next six months.

As of now, market shares are still less than 1% of total bank lending on a global scale. Yet, **growth rates are high** and are expected to increase in the future.

Business model

Business models differ across different platforms: *Balance sheet lenders,* such as Kabbage*,* lend money from their own capital base and take credit risk themselves. In a narrower sense, *marketplace lenders*, such as Lending Club, facilitate connections between lenders and borrowers but do not take on credit risk. Other companies, such as OnDeck, follow a *hybrid model.* In this case, the lender will lend to a share or majority of businesses directly while the remaining part is funded through the platform.

The offerings are still limited in scope and include different types of **credit products**. Term loans are mostly unsecured and typically offered for 3-18 months (e.g. OnDeck). Revolving lines of credit (e.g. Kabbage) provide flexible means, especially for working capital requirements, and merchant cash advances (e.g. Credibly) aim to solve temporary liquidity shortages.

Another dimension in which some marketplace lending platforms differ from others is the actual flow of funds. In a *mediated flow* model, marketplace lenders raise money from investors, hold it for at least some time and channel it towards the SME. In some cases, platforms even set aside funds to create loss reserves (“provisioning funds”) to spread credit losses across investors. In a *direct flow* model, the marketplace lender never takes ownership of the funds. Instead, the money is channelled directly from investors to the SME borrower.[34]

Investors in such platforms include retail and institutional investors, with the latter becoming more predominant. Retail investors were originally the focus of P2P lending but are now increasingly being crowded out. In the US, meanwhile, more than 70% of investors are institutional lenders such as hedge funds, pension funds and asset managers. Platforms increasingly separate the two classes with more risky segments of loans that are investable only for institutional investors.

Benefits for SMEs

Access to funding

Alternative lenders can provide SMEs with funding where banks are unwilling or unable to do so. This can lead to an overall **increasing loan volume** to SMEs. Based on a Nesta survey, 33% of SME borrowers from marketplace lending platforms were convinced that they would have been unlikely to get funds elsewhere.[35]

Marketplace lenders can also **extend the availability of credit to lower-risk classes** by bringing them together with investors with a higher risk appetite, especially institutional investors that would have had no access to SME credit otherwise. Marketplace lenders will also be able to **provide credit to high-quality prime borrowers** when traditional banks are not able to do so, because of their lack of data for assessing the risk appropriately.

Speed

Applications can typically be completed within a few hours, and do not involve a visit to a physical bank branch. Funds are then usually made available within less than one week, compared to two to three weeks for banks, or even more in emerging markets. Some, such as the European lender Zencap, expect to provide a definite answer within less than 48 hours. In a tight liquidity situation, speed can make a significant difference for a small business.

In the consumer space, China has been leapfrogging the sector’s development in that respect. For instance, Tencent’s WeChat now allows users to apply for uncollateralized loans of up to $30,000 and get a decision in under a minute.[36] With 600 million users on its WeChat platform, significant growth seems possible.

Costs

In some instances, marketplace platforms will even be able to issue credit at a lower interest rate. They can pass on the lower cost structures and can potentially price risk more accurately, based on additional data.

In many cases, however, marketplace loans are more costly than the classic bank term loan. While the rates charged are rarely disclosed, they range from below 10% to more than 45% on an annualized basis. Goldman Sachs reports that the average annual percentage rate on loans charged by OnDeck was 51.2% in the fourth quarter of 2014.[37] However, as bank credit is not available for SMEs in many cases, the only feasible alternatives are merchant cash advance providers or pay-day loan providers with interest rates as high as 75-110%, and even higher in some markets.

Convenience

Finally, loan applications through marketplace platforms are often easier to obtain than bank credit. Fewer branch visits are required, and loan applications can be completed from the SME's place of business. Typically, less paperwork is required for SMEs, as alternative lenders are able to harness already available data. The Know Your Customer (KYC) process is handled faster as well; with the growth of service providers such as Jumio, identity verification can be processed rather seamlessly.

The benefits for a national economy

Directing capital to productive use

In many developing-world countries, only a limited number of asset classes are invested in, as capital markets are little developed. Thus, money often flows into real estate as a preferred alternative to bank savings. As past examples have shown, this has sometimes created severe bubbles in the housing market, leading later to an uncontrolled downturn of the overall economy.

If idle funds can instead be invested as growth capital for smaller companies, real growth, rather than nominal value appreciation, can be created for a national economy.

Safeguarding depositors from risky investments

The safety of deposits has been one of the key concerns in the aftermath of the financial crisis. As suggested by the Vickers commission[38] and the Liikanen report,[39] banks should "ring-fence" their retail banking divisions from their corporate and investment banking arms to protect depositors from the downsides of riskier banking activities. With marketplace lending, no depositor money is used, by design, to finance riskier SME lending. Instead, money is sourced directly from investors with an appropriate appetite for risk.

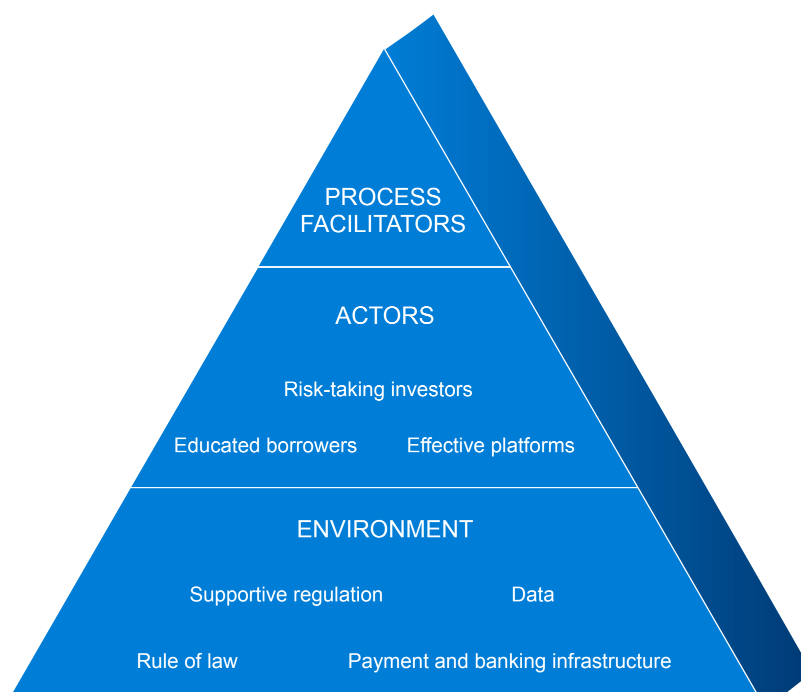
Facilitating growth

As small businesses will have capital to grow and invest, this can potentially drive national economies forward and create growth and employment in the long run.

Enabling factors

The growth of marketplace lending within a given country requires three main ingredients, namely (I) a supportive environment, (II) the presence of three central actors and (III) the support of process facilitators (see Figure 6).

Figure 6: Enabling Factors for Marketplace Lending



Source: Authors

1. The environment must provide a supportive institutional and technological context

An **existing infrastructure** is often the prerequisite for marketplace models to function. This includes an existing payment and banking infrastructure which all players need to be part of. Also, technical infrastructure, such as basic internet or mobile connectivity, is necessary for the model to work.

Alternatively, and outside of the formal banking system, mobile money lending solutions, such as M-Shwari in Kenya, are slowly gaining traction. Yet so far, they have not reached critical scale in small business finance. As a result, marketplace lending is currently providing solutions rather to the banked and "under-banked" than to the totally unbanked businesses or informal micro-enterprises.

Availability of data is another requirement for marketplace lending. Data can stem from credit bureaus, company balance sheets or electronic accounting systems. In many cases, marketplace lenders will need to leverage data from alternative data sources, such as mobile providers, social media and behaviour patterns. However, first-hand data is still preferred. Typically, the more data that is available, the more precise that the risk assessment can be made and the lower the interest rates that can be offered.

The **legal and regulatory environment** needs to be supportive or, at the least, not prohibitive to the business model of marketplace lending. Fundamentally, the general rule of law and the possibility to enforce existing claims must be ensured to encourage entrepreneurial risk-taking. In Sub-Saharan Africa, for instance, it still takes 650 days on average to enforce a contract. Almost half the value of the claim is spent on process costs.[40] As a result, marketplace lending in the region is only gradually gaining ground.

In terms of **financial regulation**, platforms in many jurisdictions have initially started to operate in a "grey area", given that dedicated marketplace lending legislation was not yet in place. This typically corresponds to a threshold point, whereby the innovation goes from "too small to care" to "too large to ignore".[41] Successful marketplace pioneers engaged in discussions with regulators early on, and were even involved in shaping the local set of rules.

2. Three central actors are needed

Firstly, a number of **well-run platforms** need to be operating. Generally, the existence of a larger number of platforms will help to spread awareness among borrowers and increase competition. Expected improvements may include lower operating costs, better customer service (such as video advice) or a broader variety of loan products. Increasing competition will force lenders to offer more competitive rates. Similarly, in the consumer marketplace lending space, interest rates charged have come down considerably over the last years.

Secondly, private **providers of capital** are needed to supply sufficient funds. Globally, institutional investors hold $62 trillion in financial assets under management – which might be enough to close the SME funding gap 20 times over.[42] Investors need to be aware of and trust marketplace lending as a relevant asset class.

Preferably, investors should not only invest on a loan-by-loan basis, but also commit larger amounts to be invested over a longer period time. For instance, Blackstone has committed $300 million to be lent out through Prosper. Victoria Park Capital has announced it will invest up to €230 million through Zencap, a European platform.[43]

However, many such institutional lenders demand a high expected return for their investment and the risk they take. Return expectations can range from 5% to more than 10% per year. Therefore, a critical challenge for many FinTech providers is to offer an attractive-enough return to those investors while, on the borrower side, being competitive with banks that benefit from historically low refinancing rates. With **high debt refinancing costs**, some FinTech lenders are currently practically excluded from lending to the prime borrower segment.

Thirdly, **small business borrowers** must be willing to approach lending marketplaces in their pursuit for funding. This requires both awareness of the availability of marketplace funding and the knowledge on how to access it. As SMEs do not see managing financing as their strength, many never start seeking out new information and, instead, rely on the advice of their bank – even if the bank declines their credit application. As a recent UK survey showed, the majority of SMEs that did not obtain credit from their main bank never reached out to any other source.[44] Active education and information about credit marketplaces, as available alternative sources, are therefore required. Beyond awareness and knowledge, SMEs also must have enough trust to use the marketplace as a source of finance. In the UK, currently only 5% of surveyed SMEs consider using marketplace lending as a source of finance. In most of the markets with a significant share of marketplace lending, the **current bottleneck is seen to be on the borrower's side**. Too few (quality) applications are received to fulfil investor demand.

3. Process facilitators can help players interact seamlessly

Intermediating parties are supposed to connect the different parties; marketplaces for borrowers (e.g. Orchard) can consolidate the offerings of various lending sites towards SMEs. On the other hand, marketplaces for investors (e.g. Fundera) allow investors to automatically invest across platforms based on specified criteria, often via application programming interfaces (APIs). By optimizing the investment process, intermediating parties can help bring additional liquidity to the market.

Some innovative firms are tackling the issue of **financial education** for SMEs. The US-based company NerdWallet aims to provide high-quality online content about funding sources for consumers and small businesses to rank high on Google searches. The rationale for it is that many small businesses start their funding pursuit on the web. However, relevant search terms are often captured by ads from sometimes doubtful payday lenders. Without much experience, prospective borrowers may be trapped into highly expensive short-term debt. NerdWallet, in contrast, aims to be ranked highly enough among the unpaid results to provide an objective overview about available funding sources.

Third-party service providers facilitate the process and increase integration. KYC and security providers help verify users' identity. Data aggregators (e.g. Yodlee) synchronize users' financial data from various sources and integrate bank accounts from different financial institutions, making data easily accessible. External risk assessment and scoring providers (e.g. Lenddo, FirstAccess) offer risk assessment based on non-traditional data, such as social media or phone records as a service for less established platforms.

Cooperation and partnerships can help increase the reach of marketplace lenders. This can take several forms; in partnerships between banks and platforms (e.g. Royal Bank of Scotland and Funding Circle), banks refer declined SME loan applications to the marketplace lender. In a more integrated cooperation between institutional investors and platforms, the bank commits a substantial amount of capital to be lent to the platform. Already in 2012, Goldman Sachs provided a significant share of a $100 million credit facility to the SME lender OnDeck.[45]

Distribution partnerships aim to provide market access through various channels. For instance, Lending Club has recently partnered with Walmart-owned Sam's Club. Small businesses that are Sam's Club members will get a 20% discount on loan fees, while Lending Club will be recommended as one of the few preferred loan sources.[46] Fundbox, the invoice finance firm, works together with Intuit, providing an interface to the Fundbox credit offering directly through the accounting software QuickBooks. Zopa has prominently partnered with Uber, offering drivers a means of financing their cars.[47]

A **secondary market** for SME loans can help drive additional investment demand. The possibility to resell loans allows investors to exit their investment before maturity. Some companies are already maintaining a secondary trading platform for the loans they originated. One of the most advanced secondary markets is in China, where the secondary trading volume in March 2015 reached almost a third of all newly originated marketplace loans.[48]

Securitization markets allow for structured risk transfer and the pooling of marketplace-originated loans. In the consumer space, the student loan provider SoFi securitized $412 million by June 2015. In the SME space, nothing comparable has been observed yet.

However, this tool – embedded in ongoing initiatives to reignite the SME loan securitization market – could further fuel the growth momentum of SME marketplace lending. For instance, the European Union (EU) has announced the specific objective to **foster SME loan securitization**. Programmes such as the SME Initiative, a joint financial instrument of the European Investment Bank (EIB) and the European Investment Fund (EIF) aim to stimulate SME financing by providing partial risk cover for SME loan portfolios. However, most current solutions are tailored to bank-intermediated securitization. Yet, for large commercial banks, getting liquidity in secondary markets is currently less challenging. Also, the size of current ambitions is often limited. For instance, the volume of guarantees on SME securitization under the EIF Credit Enhancement program typically amounts of less than one billion Euro per annum.[49] Finally, most current European proposals are mainly tailored to "high-quality securitization". This approach, however, may again exclude the very segment that would need credit the most – SMEs that do not have preferred bank access or the best possible rating, based on traditional bank assessment criteria.

A critical step in providing liquidity to the European SME lending market could be the extension of current plans by size and the inclusion of some mature marketplace lenders in the proposal.[50] For the model to succeed, concerted efforts would be required from policy-makers at the European level, as well as from commercial banks, national governments and regulators. To be eligible for such programs, marketplace lenders would most likely be required to adhere to stricter regulation. Harmonized reporting requirements and improved access to credit data could further facilitate SME securitization. First discussions seem to be under way and may show promising results in the medium term.

The risks and downsides of marketplace lending

Detrimental **effects for individuals** are a source of concern. Retail investors may lack the experience and shrewdness to deal with high-risk investments. On the borrower's side, the comparably high interest rates for SMEs are not always adequately disclosed. Furthermore, if capital can be accessed too easily, marketplace lending may **protract failures of unprofitable businesses** by granting further credit. Finally, when less person-to-person contact is involved, online fraud becomes more likely. For instance, in China, several platforms had to shut down and investor money was lost.[51]

The **stability and sustainability of the marketplace industry** is still partly in question, challenged by several factors. The credit issued is often of lower quality, and as a consequence, the risk of default increases. The lack of historic data to calibrate risk models is another source of concern, especially for newly launched platforms. Most platforms were launched after the last credit cycle downturn. More fundamentally, the general **misalignment of interest** has been raised as critical, as marketplaces issue loans but often don't retain any risk.

The inherent **systemic risk** may have unforeseeable consequences. The recently emerging credit default swap market for marketplace loans creates parties with an interest in SME failures, similar to the financial crisis in 2007-2008. In countries where withdrawal at any time is guaranteed to investors (e.g. common in China), this could trigger an unpredictable, vicious circle. Platforms need to sell off loans to provide liquidity in a downturn market, similar to bank runs. To some extent, this was witnessed during the Chinese stock market crash of summer 2015. P2P platforms had provided on-margin trading facilities, which needed to be closed down as market conditions deteriorated. As a remedy, third-party insurance is supposed to provide safety, but in case of major unrest, insurance providers may fall as well. Finally, hedge funds have recently started to take on leveraged investments to buy into marketplace loans, thus increasing the risk from a systemic perspective.

From the outside, **external factors** may challenge the business model of marketplace lending. **Regulation** on this new phenomenon has yet to be set in most countries. A substantial risk remains that stricter regulation will take away much of marketplace lending's current advantage, leaving it less attractive to outside investors – and perhaps causing a downward spiral.

Business customers may also become increasingly sensitive about the **use and sharing of data**. The discussion around Google's imposed acknowledgment of the "right to be forgotten" proved the force of this public debate. Since September 2015, a proposal has been under discussion, which is based on **borrowers having to opt-in** on the use of the data used to conduct the credit assessment. As a result, the process of predictive analysis may become less efficient and less effective, as pointed out by the Association for Financial Markets in Europe in August 2015.[52]

In China, the development of the FinTech market has been made possible precisely because of the more relaxed data privacy regimes. This allowed Alibaba to rely on the private data they held on millions of consumer to extend their offerings to small business loans. Yet, it cannot be ruled out that even China may adopt stricter privacy and data security policies in the future.

Outlook and trends

Changing market landscape

The current marketplace lending landscape is expected to change significantly over the years to come. A **consolidation** of marketplace lenders is expected. Recently, Funding Circle (UK) acquired Endurance Lending Network (US), and TrustBuddy (Sweden) acquired Geldvoorelkaar (Netherlands) and Prestiamoci (Italy). More transactions are expected to follow. In China, consolidation will be driven by regulation and the need to have a significant minimum capital base in order to fulfil regulatory requirements.

Further, an **internationalization** of players is expected. Recently, OnDeck entered the Canadian and Australian market; Funding Circle targets the United States; and Afluenta, an Argentina-based lender, is moving to Peru and Mexico. However, while a common data and tech platform can typically be transferred easily to new markets, diverging regulatory requirements and different customer behaviours limit the speed of expansion.[53]

Over time, a further **formalization** of the industry is expected as well. Industry boards are to be formed, such as the Peer-to-Peer Finance Association in the UK. Widely accepted industry standards will become prevalent; this could include standardized contracts, following the example of the Loan Market Association standards for syndicated loans. Finally, a **specialization** of players is expected, both by industry and by credit segment.

Reaction of banks

Banks meanwhile have **become very aware** of the opportunities of financial technology – and the challenges to their traditional business model of small business lending. According to an industrywide survey in August 2015, 68% of bank respondents saw their small business lending as being under "high threat".[54]

Some banks will try again to **increase SME lending** in order to capture some of the available market share. For instance, Wells Fargo launched a widely noticed initiative, "Wells Fargo works", to extend $100 billion in new small business loans until 2018.

Internally, banks will need to further **streamline processes** to make small business lending more cost-efficient. For instance, the Bank of China has built a "credit factory", particularly for its small business lending, to standardize its internal processes. As a result, only four management layers are involved in approving a loan, compared to up to 10 layers previously. And while it had sometimes taken months to process loan applications, it now takes only an average of four business days. In this way, more than 200,000 SMEs have already been served. At the same time, default levels have remained comparable to larger corporate loans.

Others banks will pursue internal innovation and develop **online models** under the umbrella of their own banking licence. In June 2015 – and to the surprise of many – Goldman Sachs announced the launch of an online platform for small business lending.[55] Funding will be provided by its New York State-chartered banking subsidiary.

Instead of pursuing in-house development, banks may also **directly acquire marketplace lenders** in order to get hold of the underlying technology or the team, a practice often referred to as "acquihire". Smaller banks may employ **white labelling solutions** to limit the initial investment required. In 2015, the Oregon Bankers Association and the Premier Community Bank endorsed a cloud-based small business lending platform, provided by the external provider Mirador.[56]

It is still hard to foresee where the industry is heading over the next years. Across geographies, however, significant changes in the market landscape for small business lending are certainly expected – ideally with a positive effect for many of them.

b. Merchant and e-commerce finance

Introduction

Starting in 2012, an entirely new set of players entered the field of small business lending – e-commerce platforms, payment processors and telecom companies. Small businesses selling their goods on platforms such as Amazon, eBay or Alibaba are now offered working capital lines and loans by those platforms. Payment processors (e.g. Square or iZettle) started to offer similar services in 2014, and telecom companies, such as Safaricom or Telmex, have increasingly moved into the loan business, starting in frontier markets.

Market overview

E-commerce platforms process a considerable amount of global transactions, driven by the digitization of the world economy. By 2020, the trade on such platforms is expected to exceed $10 trillion, two-thirds of which will be B2B e-commerce.[57] For transactions at the point of sales, payment processors, such as Square or iZettle, are capturing increasing market share. However, with margins for pure payment processing or commoditized telecom services becoming smaller, companies have an incentive to seek out more profitable services.

Benefits

Payment processors and e-commerce platforms may often be **better placed than banks** or "outside" marketplace lenders to assess the risk of advancing money to small merchants. They have visibility on a substantial portion of a merchant's daily transactions. The **collection process** is facilitated significantly, as payments to the merchants flow through their systems. Processers can take loan repayments directly out of the revenue of the small retailers.
For merchants, the process is **convenient**, as payment systems are already integrated. A contractual relationship is in place so that the extension of credit can be completed in a speedy and efficient manner. According to reports, the time between the application and payout of funds is often only one business day.[58]

Overview of different providers

Amazon

Amazon Lending was founded in 2012 to extend credit to small businesses selling on Amazon's platform. At first, the company offered the service only in the US and Japan, but is expected to start a business loan programme for sellers in the UK and seven more countries, including China.[59] Amazon uses internal algorithms to choose sellers based on data points, such as the frequency at which merchants run out of stock, the popularity of their products and inventory cycles.[60] Amazon offers three- to six-month loans of $1,000 to $600,000 to help merchants buy inventory. The company is reportedly charging annual interest rates ranging up to 13%.[61]

Alibaba

In June 2010, the Chinese e-commerce platform Alibaba launched Alipay Financial, a microcredit company, to offer loans from its own cash resources to existing small business clients. It offered 30-day working capital advances of up to $80,000 to fund sales of goods via its Taobao marketplace. Subsequently, the business expanded geographically and began offering a wider range of loan products. It also expanded its capital base by partnering with China Construction Bank and the Industrial and Commercial Bank of China. According to Chinese sources, it has now made loans worth RMB 13 billion ($2.1 billion) within the first two years.[62]

Rakuten

The Japan-based Rakuten Group is another online platform that moved into the lending space. In 2013, the subsidiary Rakuten Card started offering "Rakuten Super Business Loans" to its merchants. In contrast to Amazon, businesses were not preselected but invited to submit loan applications. The "Rakuten Super Business Loans" are intended to provide financial support mainly for business expansion and flexible working capital finance. Loans range from 1 million to 10 million yen (about $8,000 to $80,000).[63]

PayPal

PayPal first started to offer smaller loans to eBay merchants who were using PayPal. Merchants needed to have a good track record to qualify for a loan. From the original maximum loan rate of $20,000 at the time of its launch, the maximum loan increased to $85,000 earlier in 2015, with a minimum loan of $1,000. As of May 2015, the company had lent about $500 million to small businesses. A year prior to May 2015, the company was lending out about **$1 million per day**, increasing to a rate of $2 million a day after May 2015.[64] At this rate, the company would lend out close to $1 billion per year, putting it in a similar league to the largest dedicated marketplace lenders.

Square Capital

Square is a provider of credit card processing and payment solutions. Its subsidiary, Square Capital, was founded in May 2014 and offers cash advances to small businesses. According to company sources, Square Capital has already advanced $225 million in business financing to more than 20,000 businesses over the past year.[65] In April 2015, Square Capital advanced nearly $25 million in capital, at the time a run-rate of $300 million to $400 million in business lending per year.[66]

iZettle

The last entrant in the field of payment processor lending is Sweden-based iZettle. The company announced its small business loan programme, “iZettle Advance”, in August 2015. The model works slightly differently to the ones offered by its competitors. Repayments are not charged as a fixed interest rate but rather as a flat fee. Repayment is conducted in daily instalments in proportion to card sales.[67] Borrowers are able to borrow up to two times their monthly sales.

Telmex

One innovative company in the telecom space is Mexico-based Telmex, chaired by Carlos Slim. Telmex offers small business loans to its small business customers, in particular for their investments in tangible assets. It especially targets SMEs that were not able to get traditional banking loans because of the lack of credit bureau entries. Telmex bases a significant part of its credit risk assessment on big data analysis, relying on its customers’ phone records. Loans can reach up to an amount of MXN 650,000 (Mexican peso), or $40,000.

Risks

Compared to the rather fragmented and diverse landscape of marketplace platforms, the market for online merchant platforms, payment processors and “telcos” is significantly more **concentrated** among few large players. This could potentially limit healthy competition. Also, as this form of lending is part of a business relationship, it is less transparent from the outside and **harder to regulate**. On a micro level, the **lack of experience** of such players in the lending business has been a source of concern. Extrapolating from internal seller data may not be enough to properly assess credit risk over time, especially from a macro perspective.[68] As Amazon or Rakuten are not set up as banks, those players have less access to the banking network and are excluded from access to credit bureaus in some countries. Furthermore, shareholders may question the mandate of an e-commerce platform or payment processor to move into the lending space.

Outlook

For online sellers or merchants accepting cashless payments at the point of sales, financing by online marketplaces and payment processers offers a compelling value proposition. According to most experts, the trend of merchant finance is only **expected to increase, and significantly**. As the share of online sales will increase, so will the number of merchants being able to access funds from Amazon or Alipay. The move towards a **more cashless** society and the ever larger amount of data generated at telecom companies will further fuel the growth. **New players** are also expected to enter the field. In August 2015, payment processor **SumUp** closed another funding round, involving prominent investors such as BBVA Ventures and American Express. Its entry into the lending space is expected by many, with others likely to follow.

The issue of late customer payments

Overview: the phenomenon of trade credit

Business on invoice or *trade credit* occurs when a supplier allows a customer to defer payment for a period of time after delivery.[69] For small businesses in the B2B sector, those transactions often represent the majority of their business. In the UK, 80% of B2B transactions are undertaken on credit.[70] As a result, customers become creditors of the often smaller seller, a phenomenon referred to as **trade credit**. Globally, about **$74 trillion** of business is sold on credit terms.

Pain points for SMEs

While the concept of trade credit sounds simple, it is often a particularly painful undertaking for SMEs. First, it takes place **at the margins of business activity** – it is not the core purpose of any small business to give trade credit. Small businesses lack the skills, the experience and the resources to handle trade credit in a standardized manner. Secondly, small businesses in the B2B sector are almost, per default, in a **weaker negotiating position** towards their often larger customers. As a result, they often have to accept late or even overdue payments. For firms with weak bargaining positions, enforcing credit terms can be a particular problem. A survey conducted by Barclays shows that the time spent chasing late payers constituted “more than four million wasted working hours in the UK alone”.[71]

Delayed payments have become a serious issue for many small business. Late payment of commercial debt has often been cited as a factor that precipitates **financial distress** and constrains growth among smaller firms. This can even affect otherwise solvent companies with stable, long-term funding. If major customers delay their payments, small businesses soon face a severe shortage of cash – and often no immediately available source of funding to bridge this temporary gap.

Magnitude of the problem

Flows of trade credit are enormous and are greater in volume than the flows of short-term bank credit in nearly all developing and industrialized countries. The European Commission reported in 2009 that SMEs in the UK had twice as many trade debtors as large businesses, and they granted, or “rather [were] forced to grant”, an interest-free loan of £29 billion to their counterparts.[72] Despite its size and significance, this **virtually unregulated and largely informal financial market** has grown with little oversight and low visibility.

The FinTech solution

Policy-makers have mostly tried to address late payments through educational measures – with little success so far. While FinTech cannot force customers to pay earlier, it can help mitigate the acute consequences of liquidity shortages. Solutions include e-invoice management portals, supply chain finance solutions and invoice finance.

E-invoice management portals

As several studies have shown, the likelihood of getting paid seems to be directly related to how fast the invoice is being sent out, regardless of the credit terms. As a first step, e-invoicing can help suppliers to nudge their customers to make earlier payments. Integrated invoice management portals can have a significant benefit for smaller companies. Online providers such as Tradeshift help automatize receivables management and streamline the end-to-end process. The timing of the payment, however, still remains at the buyer's discretion.

Invoice finance and supply chain finance

Beyond pure online invoicing and automatic processing, FinTech companies are also getting into the traditionally highly structured and complex fields of **invoice finance** and **supply chain finance**, as described in the following section.

c. Invoice finance

Market overview

Business sold on credit remains as **receivables outstanding** on the balance sheet. For decades, businesses have started to sell those receivables to a third party (called "factor") to improve their cash position. The factor purchases receivables at a discount against immediate cash payment, and a smaller retainer once the customer has paid. This type of transaction, called **factoring**, is estimated to grow at a rate of 10-12% each year.[73] However, traditional factoring is often not fit for purpose for small businesses, as it typically entails long-term, complex contracts with fixed volumes.

The FinTech solution

Online receivables finance companies now allow small businesses to **monetize outstanding receivables** quickly and easily. Compared to factoring, online invoice finance is a rather flexible tool. Small business owners can directly connect their accounting software, such as Xero or QuickBooks, to the invoice finance platform. Integration can typically be completed within few days. From then onward, SMEs can apply for a loan based on the value of individual receivables. Since the application is processed mostly automatically, payment can be received almost instantly.

Risk models also take into account the frequency with which a business uses the platform and the reliability of its payments. Over time, and after several flawless repayments, SMEs are able to borrow at a decreasingly lower discount. Similar to unsecured marketplace lenders, invoice finance platforms themselves typically do not grant loans from their own balance sheet, but have third-party funds which they allocate.

FinTech companies such as **MarketInvoice** (based in the UK)**, Fundbox** (United States), **NoviCap** (Spain-centric) and **Finexkap** (France) have seen significant growth over the last years. The companies refuse to disclose volumes, but even with an invoice volume of more than £500 million financed by MarketInvoice, their overall market share to date remains rather minuscule.

Benefits for SMEs

With an easy and convenient way to monetize outstanding receivables, SMEs have a tool to counteract one of the most pressing pain points, namely **late customer payments**. As a result, critical working capital shortages of solvent business can often be prevented, and significant **management attention** can be freed up. As parts of the handling, monitoring and collection of receivables are delegated to the invoice platforms, small business owners can allocate their time to more productive activities.

In addition, small businesses typically **lack transparency** about common credit terms and have little idea what they should demand. A FinTech provider collects large amounts of data about underlying credit terms of the receivables it finances. It is therefore in a unique position to **aggregate data, compare credit terms** of comparable small businesses and give recommendations. MarketInvoice is said to be developing a programme to feed back information to its small business customers. Invoice finance platforms could even publish "credit term reports", highlighting perceived trends. FinTech could thus help shed some light on the highly opaque B2B credit market.

Enabling factors

A key requirement to enable such a solution is the availability of **underlying electronic infrastructure**. The SMEs need to maintain electronic account management software and be connected to the banking and payment systems. Therefore, invoice finance is a trend mostly seen in developed markets. **Regulation** has to allow the sale of receivables, either as outright sales or through synthetic structures. Furthermore, **awareness** among small businesses needs to be strengthened in order to establish invoice finance as a trustworthy and convenient source of short-term funds.

d. Supply chain finance

Brief description

Supply chain finance (SCF) is another way to improve an SME's working capital situation. In contrast to invoice finance, which usually does not rely on the cooperation of the receivables counterparty, SCF is typically **initiated by the buyer**. Traditional SCF involves a high degree of cooperation and integration between the smaller supplier and the buyer on the other end.

Business model

With the set-up of a formal SCF programme, suppliers have the ability to opt for the earlier payment of invoices at a discount (see Figure 7). The time between this early payment and the invoice eventually being paid by the buyer is typically bridged by a third-party finance provider. The supplier is thus able to raise finance against "approved payables", which in turn are backed by the credit rating of the company at the head of the supply chain.

Market overview

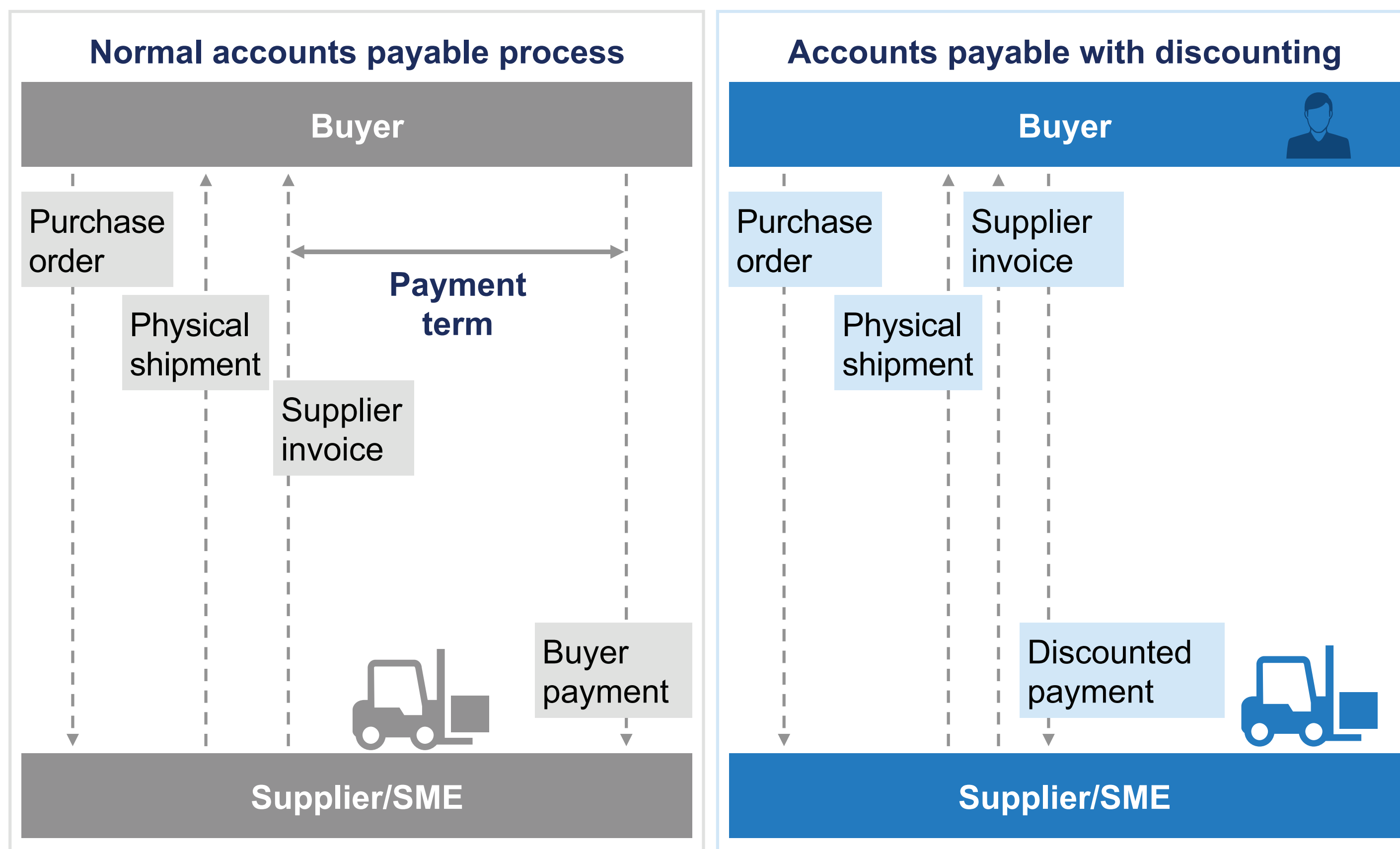
SCF remains a very small part of the overall receivables finance market, accounting for less than 4% of global market value (based on figures from the International Factors Group covering 65 countries), but about 12% by value on average in those countries where it is practiced at all.[74] According to research by Demica, leading banks are reporting current growth rates of 30–40% per year in SCF volumes. Eastern Europe, India and China are reportedly the regions with the highest growth potential for SCF providers.[75]

The FinTech solution

Traditional supply chain finance programmes typically involve complex legal frameworks and have only been efficient to operate at larger scale. A modern FinTech supply chain finance solution offers the advantage of being **efficient even at lower scale,** making working capital accessible to the entire supply chain.

The buyer first needs to connect the enterprise resource planning (ERP) system to that of the supply chain finance provider. The degree of integration between buyer and supplier is flexible and can be set according to the supplier's requirements. Small suppliers can upload invoices directly to the SCF portal or send their invoices through accounting software, such as QuickBooks or Xero. Sophisticated suppliers integrate their ERP systems to streamline the process further.

Figure 7: Supplier Payment over Time – Normal vs Supply Chain Finance Process



Source: GXS 2008; Authors

Benefits for SMEs

Small businesses benefit from cheaper cost of working capital relying on the typically superior creditworthiness of their large customer. The large customer is able to optimize its own working capital position by extending its payment terms to 90 days and beyond without putting undue financial pressure on its SME supplier base.[76] Supplier relationships are strengthened because the suppliers no longer have to work with a separate receivables factoring firm; they can use the same integrated platform they use for e-invoicing and self-services.

The Taulia model of **dynamic discounting** (see Figure 8) can also work without third-party investors. Large corporates often have vast amounts of cash reserves that lie dormant at low-yielding bank accounts or money-market funds. Nevertheless, more than half of small businesses wait between one and two months to be paid – as buyers have little incentive to pay early. In the dynamic discounting model, the SMEs choose the timing of the payment at their discretion, but the earlier, the higher the discount. In other words, if a seller chooses to be paid 30 days earlier at a discount of 1-2%, the large corporate can over the course of the year make a double-digit return on the funds employed – potentially a more attractive use of a company's funds.

Enabling factors

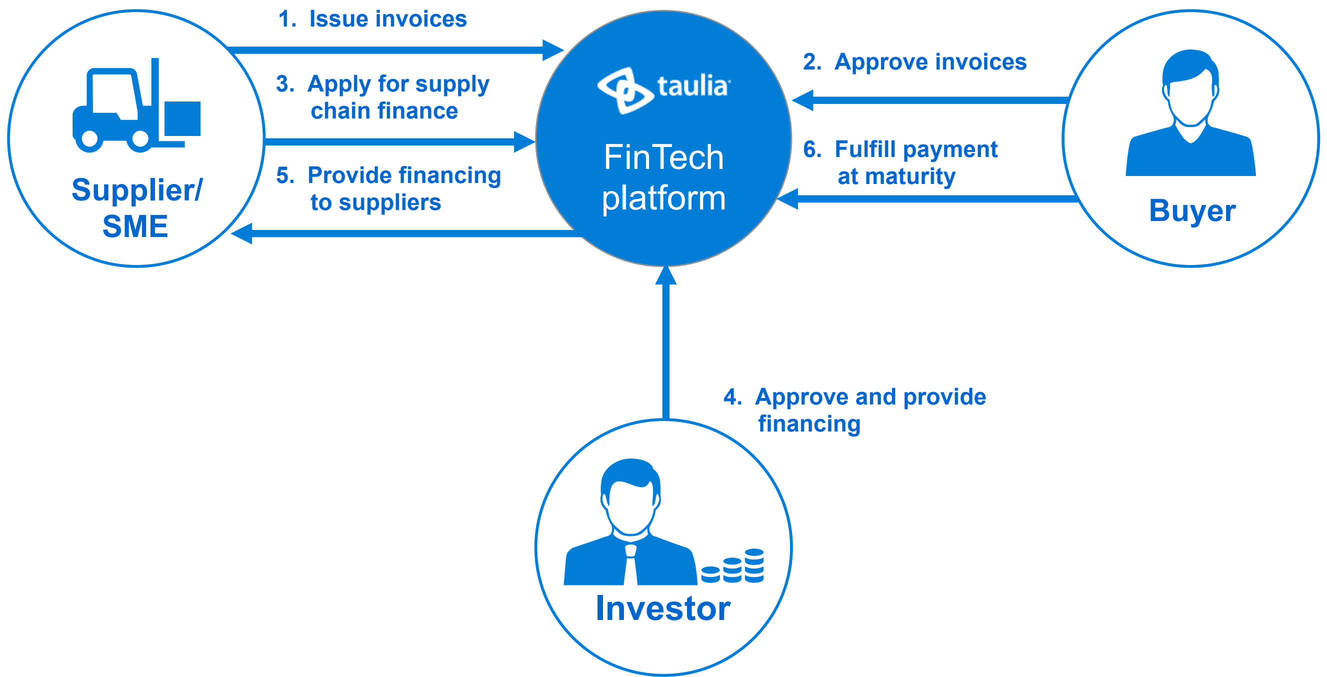
As the product is relatively new, awareness among small businesses is generally low. Further education and positive case studies are needed to make the solution more commonly known.[77] Governments and institutions can help raise awareness by providing active support. For instance, the European Investment Bank has investigated a €100 million initiative to support invoice finance platforms in the Netherlands.[78]

Supply chain finance is mainly relevant for B2B relationships, where the small business has a limited number of large clients. For instance, an industry where this tends to be the case is the automotive industry. Traditionally, supply chain finance has been very relevant in that industry. As for the FinTech provider Taulia, for instance, three of the ten largest automotive manufacturers in the world were among the early adopters.

Outlook

Supply chain finance in FinTech is still a niche yet growing market. Given the vast number of application cases, this product is expected to gain more traction soon, moving to other markets outside the United States.

Figure 8: Process Flow of FinTech-Based Supply Chain Finance (Simplified)



Source: Based on "Advanced Discounting with Taulia" (see http://www.tungsten-network.com/media/201506/advanced_discounting_with_taulia_matt_wright.pdf); Authors

e. Trade finance

Introduction

Surprisingly little has been reported about another gigantic market that has been mostly left untouched from disruption by emerging FinTech players: **trade finance.** According to estimations, the volume of trade finance per year is more than five times the amount of US dollars in circulation.[79]

Trade finance is expected to grow even further. Today, thanks to **progress in information technology**, selling across borders is more feasible than ever. Through online marketplaces, SMEs can offer their goods to a global marketplace at virtually no costs. When it comes to **conducting the transaction**, however, a high degree of friction has remained. Because time of purchase and delivery often fall several weeks or even months apart for custom-made products, the risk needs to be mitigated. Traditionally, this **involves banks on both sides**, includes rather complex processes and requires detailed documentation.

Market overview

The global trade of goods amounted to $18.8 trillion in 2013.[80] Estimates suggest about $6 trillion to $8 trillion of this is conducted as bank-intermediated trade finance (see Figure 9), including letters of credit and trade credit insurance.[81] For banks, this can be a lucrative business. Global trade finance revenues were more than $15 billion in 2013 and are expected to grow by 8% per annum until 2020.[82]

The remaining part is mainly conducted on inter-firm trade credit – one of the parties has to bear the risk until the transaction is completed.

The pain point for SMEs

The option of trade finance for SMEs has often been restricted. Small businesses lack resources to deal with the complex process and in any case many banks do not grant lines of trade credit to small business. Covering the risk of large international transactions and providing liquidity upfront, however, also exceeds the financial capacity of many SMEs. As a result, many small businesses are excluded from selling their goods in international markets.[83]

The FinTech solution

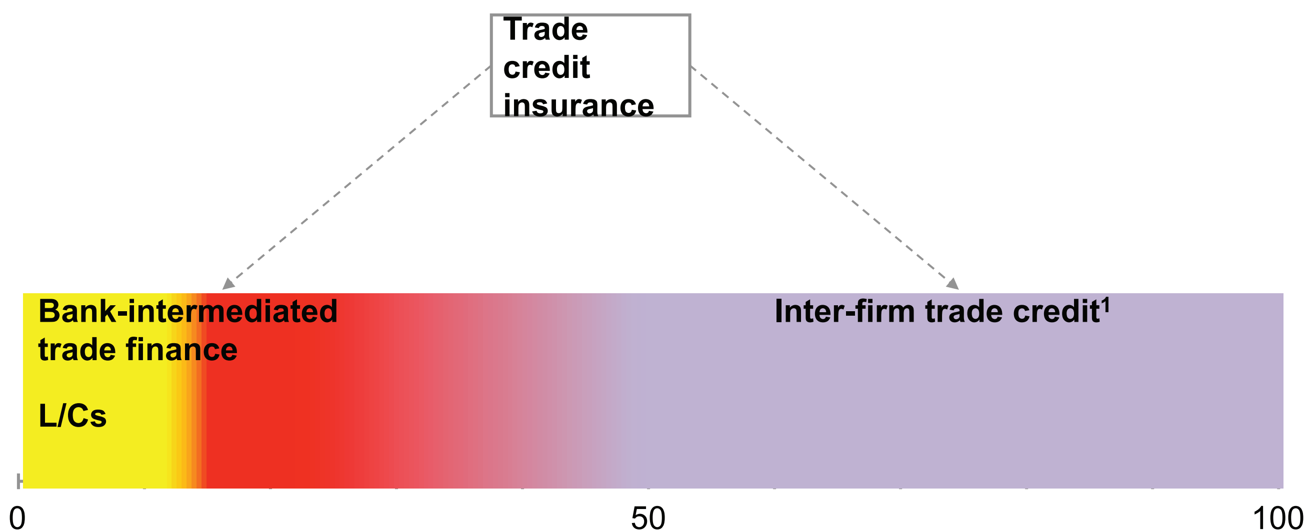
Increasingly, non-bank players develop innovative solutions to address existing needs in a better and cheaper way. Documentation remains a critical part of trade and export finance but is increasingly conducted online. As even small businesses now operate with integrated electronic systems, the current conduct involving (physical) letters of credit will likely be replaced by an online solution over time. As for many other financial products, third-party investors may be willing to provide financing means in exchange for an attractive return.

Outlook

Trade finance remains a gigantic market with vast potential for innovative players. Improved data and analysis of exposures will also reduce losses for companies able to leverage big data. Further down the road, the Internet of Things may allow for the real-time tracking of goods, eliminating numerous process steps and reducing the risks for the parties involved.[84]

New players with innovative business models may be able to help small businesses compete in the international markets for the first time – and tap into a massive revenue pool for themselves.

Figure 9: Financing Global Trade (Percentages, Illustrative)



[1] Inter-firm trade credit includes open account transactions, where goods are shipped in advance of payment, and cash-in-advance transactions, where payment is made before shipment

Source: Bank for International Settlements 2014

The New Role of Public Institutions – National and International

Few industries are as **heavily regulated** as the financial industry. The question of if and how fast FinTech players may replace traditional business models therefore critically depends on the role that regulators, governments and international organizations choose to play. These actors, however, are in an ambivalent situation. While FinTech holds enormous potential to improve the circumstances for small businesses and entrepreneurs, regulators also need to uphold their mandates, which cover:

– Financial stability
– Prudential regulation
– Conduct and fairness
– Competition and development

A country where government institutions seem to have found a constructive middle way is the UK. The British regulator, the Financial Conduct Authority (FCA), is positioning itself as a leader in a forward-looking exercise of determining the best framework to support FinTech development while maintaining a competitive and sound banking industry. Looking east, China has recently issued comprehensive guidelines for the development of FinTech, creating a tiered market to allow both incumbents and FinTech start-ups to operate.

In order for all stakeholders to benefit from the positive externalities that the FinTech industry may generate, several key objectives and principles are essential for regulators, governments and FinTech players:

Basic objectives for regulators

Cooperation: Traditionally, regulators have taken on the role of cautious custodians of stability. Driving growth and innovation has not been high on the agenda of regulatory bodies in many countries, especially following the 2007-2008 financial crisis. However, if regulators choose to enter into a constructive dialogue, positive outcomes are achievable. In many African countries, such as Kenya or Senegal, the regulators have proven very supportive, allowing a domestic FinTech industry to blossom.

Approachability: For innovators, it is often a simple but important necessity to have a **point of contact** at regulatory bodies. As one chief executive of a leading national FinTech company recently stated: “We do not even know who to talk to at the regulator. We are operating to the best of our knowledge, without knowing what exactly is required, as we are operating in a greenfield environment. If we had a person to talk to and align what we do, that would make a huge difference.” It seems that an increasing number of regulators have understood this. The UK FCA has established the Innovation Hub, the Monetary Authority of Singapore has earmarked SG$225 million in research and the Australian Securities and Investments Commission has created open office hours with start-ups to understand their concerns.

Reliability and commitment: One frequently mentioned complaint by FinTech executives is the lack of clear statements by regulators in previously undefined areas of regulation. In many instances, FinTech companies are only given nonbinding responses that leave innovators with a significant amount of regulatory risk. Ideally, regulators can provide binding responses to decrease business risk for FinTech start-ups. For instance, some jurisdictions allow for “letters of non-action” to be issued. Regulators therewith grant the right to try a process or business model within a well-defined context (e.g. a scope of activity and time). The Central Bank of Kenya originally issued only a limited licence allowing Safaricom to test out the mobile money service M-Pesa. After the model proved successful, the licence was extended and permanent regulatory guidelines were issued. Similarly, the Singaporean regulator, the Monetary Authority of Singapore, reportedly allows start-ups and financial institutions to try certain digital innovation models without necessarily getting all the licences first.

This welcome trend allows regulators to evaluate market acceptance of a technology and FinTech companies to engage with regulators early on.

Figure 10: Marketplace Lending Regulation per Country – Selected Examples (Simplified)

Model	Description	Selected Countries
Dedicated platform status	Platforms need approval by the regulator, based on a **dedicated legal status**	UK, US, China (upcoming)
Banking regulation	Platforms are mainly regulated as **banks** and need a **banking licence** to operate	France, Germany, Italy
Exempt/ undefined	Platforms are either **exempted** from banking regulation or status **remains undefined**	Brazil, Ecuador, Egypt, South Korea, Tunisia
Intermediary regulation	Platforms are regulated as **financial intermediary** or payment provider	Australia, Argentina, Canada, New Zealand

Source: Grant Thornton 2015; Team analysis

Timeliness: Today's markets are driven by ever shortening product innovation cycles. Regulators therefore need to adapt and shorten internal processes to be able to react to innovation in a timely manner. However, while speed is important, it is not always a value in its own right. Regulators need to be wary about which technologies they promote and careful not to follow every technological fad. As much as possible, regulators should **remain technology agnostic** to avoid favouring one technology over another – especially if markets have not yet identified a clear dominant solution.[85] As a recent example, fingerprint identification has been perceived as a key innovation by many. Regulators were facing demands to quickly approve the technology for far-reaching KYC purposes. However, recent security breaches have raised significant concerns and doubts about some of the proposed application cases.[86] It will be crucial for regulators to find the right balance between prudence and the enablement of innovation.

Harmonization: Currently, the global regulatory landscape for marketplace lending is highly fragmented (see Figure 10). To foster the growth of an international industry and to limit regulatory arbitrage, the further harmonization of regulation and standards would be desirable.

Potential actions for governments

Governments can play a vital role to support the growth of a domestic FinTech industry. Targeted activity can take several forms:

- **Open data:** Governments have a paramount database of their citizens and businesses. Sharing some of this data could tremendously enhance the ease of doing business. The areas of KYC, identity verification and risk assessment in particular could benefit significantly from utilizing government-owned data. Public concerns for security and privacy have limited many governments' ability to act. It seems that the US, Europe and Australia are taking the lead. The FCA recently launched an open banking API consultation and in Australia, the Centre for International Finance and Regulation has engaged research on Regulatory Analytics and Data Architecture.[87]

- **Direct funding**: Governments can also rechannel some of the budget dedicated to small business support. Funds can be lent through marketplace lenders, strengthening the credibility of this young industry. Regional and local government authorities can act in a similar manner, thus supporting local businesses in a targeted fashion. For instance, in the UK the British Business Bank committed £40 million to be lent to SMEs through the marketplace lender FundingCircle over a period of 18 months.[88]

- **Government activity** can significantly increase the adoption of the marketplace model. In the UK, the government has taken steps to support this growth. Tax benefits for marketplace investments are to be granted as part of the Individual Savings Accounts (ISAs) scheme. Furthermore, the government is considering making a referral scheme mandatory, under which banks would be required to forward declined loan applications to alternative lenders. Governments can also play a coordinating role among private stakeholders and facilitate the dialogue between private parties and public institutions.

MarketInvoice case study

In the UK, the company MarketInvoice has received active support, both on a national and regional level. On a national level, the British Government leveraged its British Business Bank initiative to invest £5 million through MarketInvoice's platform as part of a wider effort to provide liquidity to SMEs within a rather stagnant credit environment.[89]

On a regional level, the Greater Manchester Combined Authority (GMCA) entered into a partnership with MarketInvoice in 2014. The GMCA is buying invoices owed to Greater Manchester businesses in order to release money otherwise tied up for 30 to 120 days.[90] The GMCA will buy up to 50% of all invoices traded by local companies, up to an amount of £16 million over a 12-month period.

Collateralization regimes can be another critical component. In many countries, the lack of collateral limits the ability of banks, but also FinTech platforms, to lend. Governments can strengthen the capabilities of these players to lend against an SME's movable asset by setting up a dedicated collateralization regime. Two countries that have embraced such a reform in close collaboration with the IFC are Ghana and China. In both countries, the authorities have been driving the legal and regulatory reforms and helped establish centralized electronic registries.[91] Based on IFC data, in Ghana around 60,000 loans were registered in the central registry, providing more than 8,000 SMEs and 30,000 micro-enterprises with loans and creating thousands of new jobs. The most relevant forms of movable collateral have been inventory and receivables with 25%, household goods with 20% and vehicles with 19% of all assets registered.

Basic principles for FinTech companies

While supportive action from regulators and governments is critical, **FinTech companies** (FinTechs) must also contribute their share to create a cooperative environment.
Compliance: FinTechs should always comply with the strictest available standard. Not only will this prevent costly adjustments to their business model later, it will also signal the willingness to cooperate with regulators. A company learned this the hard way was the marketplace lender Prosper. In 2008, the US Securities and Exchange Commission found that Prosper's Borrower Dependent Promissory Notes were securities that had been sold without registration or applicable exemption. A "cease and desist" letter in November 2008 effectively halted Prosper's lending marketplace and required the company to completely relaunch its business – which it eventually did successfully, setting a precedent for many players to come.[92]

Organization: Regulators often criticize the fragmentation of the FinTech landscape. "Whom do I call if I want to discuss peer-to-peer lending," a senior executive in a regulatory body complains. Some industry verticals have started to organize themselves on a national level. Meanwhile in the UK, the **UK P2P Finance Association (P2PFA)** has become a credible player and conversation partner for public officials. The P2PFA represents over 90% of the peer-to-peer lending market in the UK, including consumer lending, business lending and invoice finance.[93] Its member base includes all major national players, such as FundingCircle, LendInvest, MarketInvoice, RateSetter, ThinCats and Zopa.

In other countries and especially at the international level, however, more **alignment and cooperation** is required to convey relevant messages, especially in the presence of powerful banking interest groups. In this context, international organizations and forums such as the G20 could help facilitate the dialogue and foster the formation of credible supranational FinTech industry organizations.
Transparency: New origination volume is currently one of the most important metrics against which marketplace lenders are being assessed. However, industry growth that is too rapid may amplify the concerns of regulators about credit quality. Lenders should therefore proactively provide evidence about the quality of their portfolio by sharing details and portfolio metrics with regulators. Increasingly, marketplace lenders such as Landbay are also employing **third-party stress tests** to signal reliability.

Opportunities for Development Finance Institutions

Introduction

A group of institutions that has significantly contributed to the financial inclusion of SMEs in the past are **International Financial Institutions** (IFIs), such as the IFC, European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB) or African Development Bank, as well as their national counterparts, the **Development Finance Institutions** (**DFIs**), such as the US-based Overseas Private Investment Corporation, the British CDC Group or the Dutch Development Bank FMO. They are government-controlled institutions that invest in sustainable private-sector projects with the objective of spurring development in developing countries.

Ways to support SME finance

Traditionally, a number of instruments have been applied by IFIs and DFIs:[94] In many cases, DFIs are providing **direct funding** to local banks, which is passed on to small businesses along predefined criteria. A recent example is the $12 million SME loan by the EBRD to a privately-owned bank in Belarus.[95] In other cases, DFIs offer **risk sharing mechanisms**, such as first-loss pieces for certain loan tranches. On the equity side, DFIs also take on **minority equity investments** or invest as a limited partner in private equity funds that provide risk capital to small businesses. Over the years, the EBRD alone has invested in more than 150 private equity funds.

All investments must meet three overarching criteria: they must be **additional**, i.e. going where other investors do not go to avoid "crowding out". They must be **catalytic**, i.e. drawing other investors' money in. Finally they must be **sustainable**, i.e. ensuring long-term viability. Given the complex nature of the contractual set-up and monitoring of agreements with local banks, investments usually tend to have a volume of around $10 million to $50 million.

A new role for DFIs in a changing world?

The general approach of DFIs has not changed much over past decades. Preferred partners have mainly been banks and professional investors. Often, DFIs have faced the issue of intending to provide funds but lacking local institutions that were able to deploy the money. In the near future, **marketplace lenders could fill the void** in small business finance that the banks have left or were never able to fill. First, DFIs could **provide direct funding** to marketplace lenders. Such a step would send a powerful signal to the markets and help establish marketplace lending as a trustworthy business model and channel investor money to global growth markets.

Second, DFIs could **provide risk sharing guarantees**. This would encourage "crowding in" from other commercial investors and de-risk operations for marketplaces. In the current environment, market liquidity is often sufficiently available, but investors are still hesitant to invest in high-risk emerging markets. DFIs could thus play a crucial role by drawing other investors in.

Third, DFIs could help **ensure that high-quality standards are met**, a role that DFIs have always undertaken. When investing in private equity funds as limited partners, DFIs have usually set strict requirements for internal governance and the nature of allowable investments. When providing funds or guarantees to marketplace lenders, DFIs can have a positive influence on those players and can ensure best practice standards are met.

From a **technical adviser perspective**, DFIs could help the still young FinTech organizations to scale up their SME lending in a prudent way. DFIs have decade-long **expertise in how to underwrite small business loans**. Combining the experience of small business lending in developing markets with the new technology of marketplace lenders could be beneficial for both sides. Levels of support could include defining selection criteria for loans and providing market know-how or the calibration and stress testing of risk models.

From an **internal governance perspective**, DFIs could help ensure that marketplace lending platforms meet Environmental, Social and Governance guidelines. From an **international oversight perspective**, the involvement of DFIs could be valuable as national regulators are setting very different standards across countries. In marketplace lending, no agreed upon standards equivalent to Basel III exist yet. Acting as a critical and consistent point of review across countries, DFIs can help set best practice standards and ensure a coherent level of international governance.
Taken all efforts together, DFIs could de-risk investing in marketplace lenders for commercial investors significantly. DFIs involvement may **act as a catalyst for further investors**, as a result significantly improving the funding situation of small businesses.

Requirements

Certain criteria on the side of potential marketplace partners must be fulfilled to enable active roles for DFIs. First, platforms must already have **critical scale** and a track record of successful investments of at least 2-3 years. This could include platforms from developed markets that want to expand into new geographies. Second, a **significant funding gap** for small businesses must exist in the target market to justify DFI involvement. Third, **commercial investors** must show potential **interest** in order to maximize the catalytic effect.

The current status

As of September 2015, no such cooperation exists. While some DFIs have started to investigate the effects of FinTech, no concrete action has yet been taken. However, initial off-the-record conversations with DFIs and marketplace platforms have shown general interest from both sides. Supporting marketplace lending in emerging markets could be additional, catalytic and sustainable. A **first pilot** between a marketplace lender and a DFI in an emerging market may be a worthwhile experiment. If successful, the **roll-out to a much larger scale** could follow.

Conclusion: FinTech Can Change Small Business Finance in a Significant and Sustainable Way

FinTech has recently captured a lot of public attention – for a good reason. If given the right environment, FinTech could become one of the most powerful tools to support small businesses and thus stimulate sustainable economic growth.

Marketplace lending solutions along several products offer enormous potential to improve the funding of small businesses, as institutional capital is readily available. Marketplace lenders connect risk-taking institutional investors with small businesses in need of funding. Online platforms, payment processors and telecom companies can build upon existing business relationships and make use of their customer knowledge.

Invoice finance platforms can provide an effective tool to overcome liquidity shortages and improve the working capital situation of small businesses. Online supply chain finance will integrate existing supply chains more deeply and may lead to positive outcomes for all parties involved. FinTech in trade finance is still at an early stage but promises great potential to unlock a global customer base for small businesses as never before.

With their integration into the entire FinTech ecosystem, small businesses can participate in many solutions that were previously only available to larger companies.

For FinTech to realize its full potential, the coherent action of several parties is required. FinTech providers should aim to become collaborative partners, comply with regulation, act transparently and become even more coordinated in the medium term.

Governments can set the right incentives and provide direct support to help their national FinTech industries to blossom.

Regulating bodies can create a positive and cooperative environment that promotes innovative solutions. At the same time, they should ensure the protection of individuals and systemic viability by installing appropriate regulatory frameworks. DFIs could choose to play a catalytic role in driving the adoption of marketplace lending, especially in emerging markets.

Time will tell if FinTech will live up to the tremendous hope – and investment money – it offers. The importance of small businesses and the potential that FinTech could bring to them allow us to believe it will.

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About the Authors

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Arnaud Ventura is the Founder and Chief Executive Officer of Microcred Group. To date, Arnaud has built a group of eight banks and financial institutions, offering financing solutions to more than 400,000 entrepreneurs in micro, small and medium-sized enterprises in Africa and China. Microcred banks employ more than 2,700 employees and have more than €350 million in assets. Microcred banks are profitable and have been delivering sustainable returns to their investors.

Arnaud was first involved in financial inclusion when in 1998, at the age of 25, he co-founded Positive Planet Foundation. Before that he worked in the financial sector in France and Argentina and co-founded two leading internet providers in France and Thailand (Club-Internet and Internet Thailand). Arnaud speaks English, Spanish and French fluently. He was nominated as a World Economic Forum Young Global Leader in 2013 and as a French American Young Leader in 2003. He is a co-founder of the French China Young Leaders Foundation.

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Michael Koenitzer is a member of the Financial Services Industry team and co-leads the Promoting Global Financial Inclusion initiative at the World Economic Forum in New York. He manages all aspects of building momentum for the initiative by organizing roundtables and launching impact projects in different geographies. Michael also leads the Global Agenda Council on the Future of Financing & Capital, which is developing best practices on closing the gap between available funding capacity and the lack of funding provided to SMEs around the world.

Prior to joining the World Economic Forum, Michael spent four years as an independent consultant closing down structured finance elements and valuing banks for several European central banks. Prior to these consulting activities, Michael spent 20 years in corporate and investment banking, primarily in the structured finance area in the US and Europe. Michael holds a master's degree in economics and business administration from HEC Lausanne, the business school of the University of Lausanne, Switzerland.

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Peer Stein is Director of the Finance and Markets Global Practice at the World Bank Group. He is responsible for the global solutions of the Practice's financial, advisory and convening services, including financial sector reform and policy, financial infrastructure and access, and finance for development. Peer chairs the World Economic Forum's Global Agenda Council on the Future of Financing & Capital and also leads the World Bank Group's engagement with the G20 on financial inclusion.

Peer joined the IFC in 1996 and has worked in Asia, Africa, Latin America, the Middle East and Eastern Europe on both the investment and advisory sides of the IFC. He holds a master's degree in business administration and economics from Witten/Herdecke University, and teaches financial sector reform and development at Johns Hopkins University's School of Advanced International Studies.

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Before moving to Oxford in 2011, Peter spent 22 years on the faculty of Harvard Business School, most recently co-founding the Harvard innovation lab (i-lab), a cross-university initiative to foster entrepreneurship. Peter earned his AB in economics summa cum laude, his MBA and his PhD in business economics at Harvard University.

Daniel Drummer
Daniel Drummer is a management consultant within McKinsey & Company, advising global banks and private equity funds. His focus is on digital technologies and disruptive innovation. Daniel is a member of McKinsey & Company's Big Data and advanced analytics group.

Before joining McKinsey & Company, Daniel worked for the Royal Bank of Scotland in the Investment Banking Division and in a strategic role for the chief executive officer of Central Europe. Daniel has been an investment manager at the SBS Seed Fund since 2014 and sits on the Advisory Board of two portfolio companies. He is the co-founder of the Bloomberg NextB2B Forum, bringing together successful start-ups, corporates and venture capitalists. Daniel holds an MBA degree from the University of Oxford, a master's degree (LL.M.) in transaction law and a bachelor's degree in international business.

Endnotes

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