New Wave of Growth in China

Innovation through Developing SMEs

MasterCard Worldwide

Executive Summary

After decades of unprecedented growth China now needs a new growth model based on innovation and higher value manufacturing and service. Focusing on the right areas to enhance its innovation ecosystem will be important and SMEs may have to be at the center of this; SMEs arekey drivers of innovation in most countries.

Countries like Germany have fully taken advantage of this SME strength, but China has significant work to do to address obstacles its SMEs face. There are several obstacles,but two are the focus of this paper: the lack of access to low-cost finance and the significant inefficiencies in their financial supply chain. While other issues, notably human capital and fair regulation and rules of law are of great importance too, we shall stay focused on the two financial ones we lay out above.

Based on this scope and our global assessment and China's position, we believe China could implement a number of measures to address the obstacles faced by SMEs including – 1) Subject SOEs to market discipline 2) Develop an SME lending focus 3) Reform its interest rate regime and 4) Leverage innovative solutions to improve financial supply chain efficiency.

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New Wave of Growth in China -Innovation through Developing SMEs

China's new wave of growth hinges on its ability to innovate

Over the past 3 decades, China has succeeded in rapid industrialization to become the world's factory where the tasks of industrial production across most industries are being outsourced to China. This wave of growthin China has been driven by a global division of labor as the world has recognized China's comparative advantages including large-scale labor, low costs, and relatively good infrastructure. China's entry into the WTO magnified this phenomenon by giving China unprecedented access to world markets, an opportunity that China seized well.

However, this wave of grow this not sustainable at the same pace any more, as some of the premises of the success so far are changing. On the demand side, the world demand for manufactured goods made in China is not as robust and importers are looking for better and more creative products. On the supply side, China's low cost labor based comparative advantages are shrinking. Global manufacturers are finding low cost countrieslike Vietnam, Bangladesh and Africa more attractive.

To remain globally competitive, China urgently needs to embark on a new wave of industrial growth driven by innovation rather than relative labor cost advantages. By innovation, we mean not just new products or technologies, but also continuous process and design improvements to established products such as automobiles or machine tools. Chinese leadership has made it clear that a new development model is required: a shift of focus to domestic consumption and higher value manufacturing and service figures prominently in the current five-year plan.

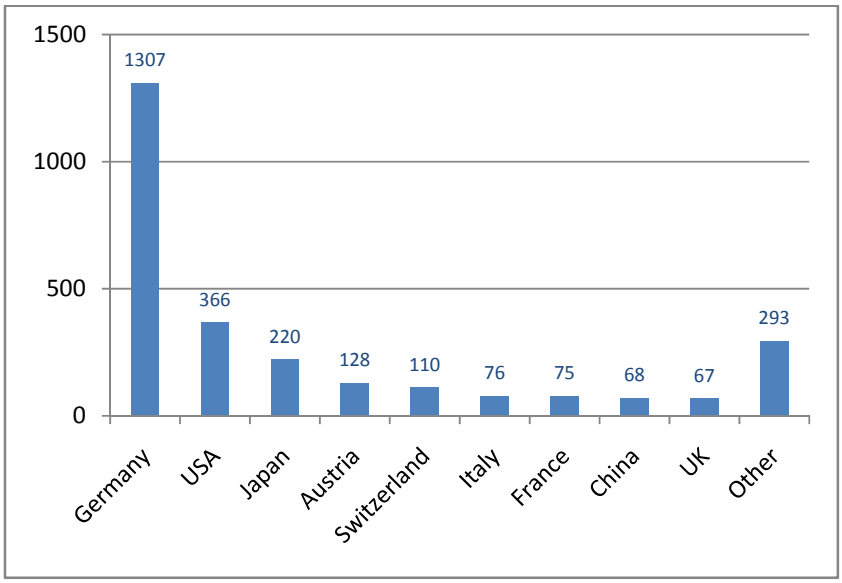
Importance of SME's in fostering innovation

SMEs are one of the most important drivers of innovation in most countries. For example, in the US, among high patenting technology firms, SMEs produce 16 times more patents per employee than large enterprises[1]. The "German Mittelstand" companies (Germany's SME segment) are some of the most innovative in Europe with 54% of them launching an innovation onto the market between 2008 and 2010[2]. This should not be surprising because large established enterprises face the "innovators dilemma" where their profits depend on the stability of the very product markets that innovation always disrupts. SMEs on the other hand account for a disproportionately high share of real innovation because it is the only thing that makes them relevant to investors and customers.

And this success at innovating does translate into economic growth. "Mittelstand" accounted for 52% of Germany's economic output in 2010; and whereas large firms cut jobs between 2008 and 2011 (-2.4%), the Mittelstand increased employment by 1.6%[2]. In the US, SMEs accounted for 65% of net new job creation between 1993 and 2009[3]. The impact on the overall economy is even greater because new jobs create more jobs, referred as the employment multiplier which for some industries like manufacturing could be close to 3[4]. Research has also shown that SMEs with their local focus on employment and spending are better at boosting the overall domestic consumption. For example, spend with SMEs could have 2-3 times the impact on domestic spending compared to spend with large enterprises, known as the local multiplier effect[5].

Like other countries globally, in China SMEs have been the drivers of innovation accounting for 66% of patents[6]. However, the issue in China is that when compared to SMEs in Germany and other global powerhouses, China's SMEs are not able to translate the intellectual capital to innovative products and services. Most of China's SMEs are focused on being suppliers to large companies or serving predictable, stable industries (auto parts, packaging).For example, China produces a fraction of the "Hidden Champions" (Figure 1) Germany produces and also far less than US and Japan. "Hidden Champions" are highly successful small companies that are leaders in their niche market[7].

Figure 1: "Hidden Champion" in the International Comparison (2012)



Source: Germany's, Federal Ministry of Economics and Technology (BMWi)

Current Status:China's ecosystem supporting innovation will have to significantly improve

To lead on innovation in the next wave of growth will not be easy. In the 2012 Global Innovation Index developed by the World Intellectual Property Organization (WIPO) and INSEAD that ranks 140+ countries in their ability to continuously innovate, China was ranked 34 which was significantly lower than US(10) and Germany(15). In particular, China under-performs on the state of its ecosystem that supports innovation. On this element China was ranked 55.

Other data suggests a big gap in China's ability to foster innovation:

- Fair and efficient access to capital for all participants – Based on World Bank's ease of getting credit index, China is ranked 70 compared to US which is 4
- Human capital grounded in academic rigor and creativity– China's education system as exemplified by the memorization heavy university entrance exam "Gao Kao" discourages entrepreneurship and creativity[8]. In contrast, the US education system strikes a good balance between knowledge based learning and creativity and has over half of world's top 100 universities compared to 2 for China[9]
- Fair regulation and rules of law that encourage market participation. China has significant ground to cover – for example, Intellectual Property Rights Index[10] ranks China 59th and US 4th

Access to capital is an area where SMEs are the most disadvantaged and is often a survival issue as well.We will focus on this issue in this paper.

Let's examine the access to capital in more detail

A、Lack of Access to Low-Cost Financing

They key reason behind SMEs difficulty in getting working capitalhas to do with banks that are in the business of providing working capital and how they function. With large enterprises, banks feel comfortable providing working capital because these firms have substantial capital, an earnings track record or state guarantees to protect them from loss.This logic also dissuades banks everywhere from lending to SMEs which typically lack sufficient history and stability of earnings. Since working capital is a survival issue, SMEs are forced to turn to expensive finance companies along with grey lending by so-called "shadow banks".

The situation in China is no different. Only the most qualified SMEs can get loans from banks, hence SMEs account for only 20-25% of bank loans despite driving a much higher share of GDP[6].In addition, the interest rates for loans to SMEs in China are significantly higher than those to large corporations. For example, SME loan interest rates by banks were estimated to be about two times of the rates enjoyed by large corporations (i.e., rates for SMEs were often 20%-50% over the benchmark rates set by PBOC, while the large corporations may receive up to 30% discount off the benchmark rates)[11]. Many SMEs cannot obtain bank financing even at such rates, and have to seek out so-called "social lending" that carries much higher rates.

Bank financing issues for SMEs in China are magnified by the state-owned enterprises (SOE)dominance in China's economy. China's large banks have little incentive to serve SMEs because they can easily earn very good profits by only serving the SOE customers. Many SOEs are large in size and operate in protected industries; hence loans to them possess many advantages over SME loans in terms of large loan size, lower risk, and ability to provide sizable deposits. These advantages, combined with a guaranteed healthy interest margin via thetightly regulated deposit rate cap and lending rate floor under the current interest rate regime in China, make lending to large SOEs very attractive financially. In fact, all banks need to do is to balloon their loan sizes to make more money.

This is made worse by the "life-long loan responsibility" policy at state-owned banks. This policy, designed to reduce lending risks by holding the lending department staff responsible for the life-long performance of a loan, has the unintended side effect of staff becoming overly concerned with lending to SMEs for fear of loan defaults that threat their job security, even if they can charge higher interest rates to compensate for the higher expected losses. Instead, the lending department staff often finds comfort in lending to those large state-owned enterprises that are considered implicitly guaranteed by the government, so that they can avoid the severe penalty of loan defaults under that policy. This is an unfortunate issue limiting SME access to bank loans because state-owned banks dominate China's banking

industry with over 70% in assets[12]. Till now, China's banks have not developed sufficient tools and capabilities to profitably and supportively lend to SMEs.

B、Significant inefficiencies in the financial supply chain

The other reasonthat makes working capital financing issues worse for SME's is the significant inefficiencies in their financial supply chain, specifically their procure-to-pay processes.And given the important role SMEs play in cross border trade including in China,cross border financial supply chain inefficiencies are equally important as domestic supply chain inefficiencies.

The roots of the inefficiencies in the domestic and cross border payment systems are small businesses'scale and cost structure that make SMEs unable to benefit from the traditional electronic payments. The result is higher working capital requirements for SMEs because of the lower velocity of capital through the supply chain.The other impact is higher operations costs for SMEs to support their financial supply chain that puts them at a significant competitive disadvantage compared to large enterprises.

To understand these inefficiencies, it is important to understand the key process drivers and the role of electronic payments in reducing the costs and lengths of those processes. Interestingly, bulk of the process activities are non-payment related. For example, 86% of costs related to a check transaction in US are for non-payment related activities like approvals and reconciliation[13] and are likely to be smaller (thereby making the process faster) for electronic payment methods that lend themselves better to automation compared to paper based payments like checks and cash. Unfortunately for SMEs, their scale and cost structure make the traditional and broadly available electronic payment methods like ACH and credit transfer less feasible for them, leading to not only higher costs but also slower procure-to-pay processes than large enterprises. For example, penetration of electronic payments in SMEs in the US market is significantly lower at around 30% of dollar value compared to a 60% penetration for all businesses[14].Additionally, based on research conducted by CFO Research services these inefficiencies were mentioned in the top 5 concerns by finance professionals[15] SMEs are urgently in need of new electronic payment means that serve their unique needs well.

The problems in the financial supply chain are magnified in the case of cross border payments that are much more complex and involve the coordination of value chain participants and systems across national boundaries. A lack of alignment with the global open payment standards like in China further aggravates the issue because of the greater need for integration between domestic payment systems and international systems and the requirement to participate in disparate payment systems.

Mobile payment in Japan is a case in point. Although Japan led the world initially on contactless and mobile contactless payment implementations, its FeliCa technology failed to join the ISO standards later. The end result was that Japan's standards are not compatible

with the rest of the world, and Japan's FeliCa standard operators are now looking for ways to support open loop standards and move away from FeliCa and migrate to international standards (ISO 14443) for seeking cost effectiveness and global compatibility. Recently, NTT DoCoMo, one of Japan's largest telecom operators, announced to partner with MasterCard to bring the FeliCa based mobile wallets solution to be open-standard based[14].

Cross-border payment is just one example of how open standards could benefit SMEs. ISO has repeatedly argued that open standards support SME development, because compliance with such standards help SMEs compete on a level playing field with bigger enterprises and open up the export markets[14].

Way Forward

How should China address the issues of SME financing and supply chain efficiency head on? We studied a number of banking and technology cases globally and found encouraging successes. We believe that there are 4 key imperatives for China.

1、Remove the significant structural advantages of SOEs over SMEs

As discussed, SOEs magnify the obstacles for SMEs to access financing in China. China could benefit from removing the significant structural advantages of SOEs and supporting private companies by creating a more level playing field. There are several examples of countries that have made this transition without resulting in political instability. For example, prior to 1980, the UK possessed one of the largest SOE sectors in Europe, but in the 80s embarked on an extensive privatization program[16]. The result, employment in UK's public sector dropped from around 8% of UK's employment in 1979 to less than 2% in mid 1990 s[16].

There are two lessons to be learned from how UK achieved its privatization goals and countries throughout Europe, from France to Germany and the former communist states of Eastern Europe copied the UK model[16]. The first lesson is that UK used a phased approach starting with smaller enterprises such as housing that also operated in private markets and then moving to the large, more complex monopolistic enterprises like public utilities. The second lesson was that UK used a two pronged approach for privatization that included a) selling (full enterprise or shares) to the private sector and b) subjecting the SOEs to the same market discipline as private enterprises.

China has made some significant progress in reducing the role of SOEs, but that is not enough. SOEs still account for close to 30% of GDP[17] which although significantly lower than the 90% share in the 1970s[18] is still higher than the developed countries (UK's SOE contribution to GDP was about 10% before its privatization program[16]).

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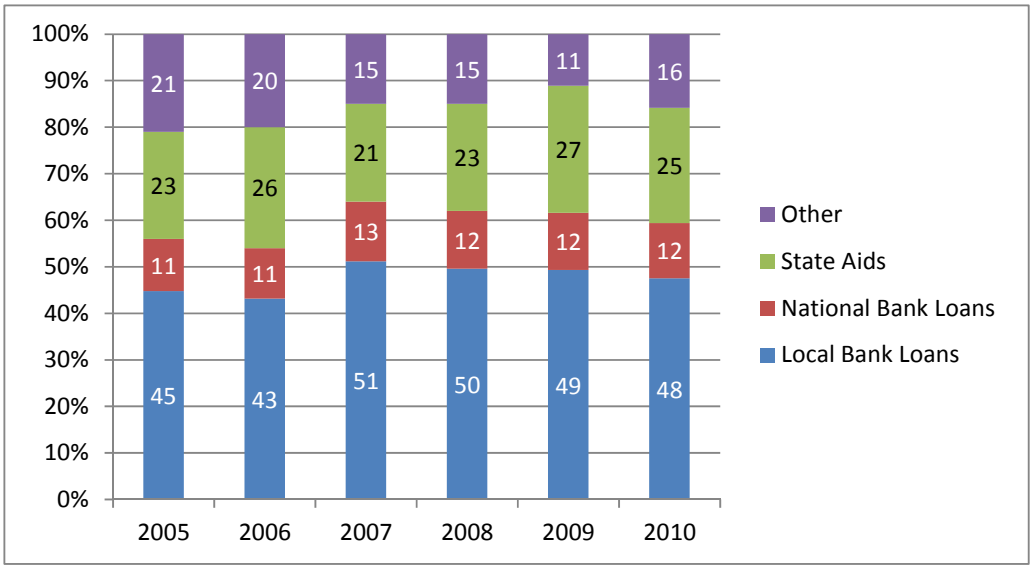
2、Developing an SME-lending focus

As discussed earlier, SMEs are often not well served by banks. A caveat to this point is that a small/local banking model lends itself better to SME lending as compared to a large bank dominated banking system. For example, in US small and mid-sized banks account for 20% of bank assets but 54% of small business lending[19]. Even in China, loans to SMEs are only 10% of large banks' portfolio compared to 20% for small banks[6]. The reason for this behavior is that small, local banks, unable to compete in serving large corporations due to limitations in footprint and scale, have to focus on building relationships and tools locally to serve SMEs. Overtime, such local banks have been able to overcome the inherent challenges in servingSMEs. Perhaps the best example of success is the "Mittelstand", Germany's vibrant SME segment. It is considered the most innovative SME segment globally producing nearly four times the number of champions compared to its closest rival US[2]. In fact it is these firms rather than the traditional German national champions like Daimler, Siemens and other large enterprises that have powered Germany's new wave growth. Today "Mittelstand" accounts for over 60% German employment and over 50% of its economic output[2] and is 2-3 times more profitable than the large German enterprises[20]. Besides their own equity money, the true Mittelstand companies have historically gotten the working capital they needed to expand their operations and launch innovative new products from the hundreds of local savings and cooperative banks (Figure 2) that make up over two thirds of all financial industry assets in Germany[21].

Figure 2: Source of External Finance for the Mittelstand



Note: "Other" includes alternative forms of financing including mezzanine or venture capital
Source: Germany's Federal Ministry of Economics and Technology (BMWi); MasterCard Analysis

France is an example of a country that has long neglected the importance of SMEs and their financing requirements and is just realizing its mistake. For historical reasons bank finance has always been largely closed off to SMEs in a highly concentrated banking system with strong ties to national champions and the state. It took France until 2008 to come up with its own term for Mittelstand: *"Entreprises de taille intermediaire"*[22]. But the success of the Mittelstand has motivated France to transform its own SME segment to boost its growth as the euro crisis chips away at the success and confidence of the large national champions[22]. Recently Hollande's government announced a new bank called Banque Publique d' Investissement (BPI) to steer public and private capital into SMEs[22].

Economies are well served when they have the right mix of global banks, large national banks and smaller regional / local banks to create efficiency in financing.Because large banks dominate China's banking landscape, elevating their performance in serving SMEs is also important. Although not easy, this can be achieved. A notable example is JP Morgan Chase that enhanced its local banking capabilities in the US, including hiring more small business bankers, leading to over $20.2 billion in new credit to small businesses during 2012, an 18 percent increase over 2011[23,24]

3、Reform Interest Rate Regime

China should continue to carefully reform its interest rate regime to let the market forces set equilibrium interest rates by risk profiles. The resulting drop in the lending margin to large corporations will motivate China's banks to increase focus on SME lending in order to preserve good interest margin. Of course, interest rate reform is not without risk and regulators and banks need to prepare carefully:

- The key task of bank regulators is to set appropriate standards of bank capabilities, not just financial ratios, and see they are achieved and maintained by individual banks through capability audits
- Banks must get ahead of the curve in building pricing and risk management capabilities to operate safely and profitably in a liberalized interest rate environment before the gradual process of reform gets ahead of them

4、Develop Electronic Payment Innovations that Meet SMEs' Unique Needs

SMEs' financial supply chainhardly benefits from the traditional electronic payments such as ACH and credit transfer. There is a need to create electronic payment systems in the areas of trade finance, T&E and purchasing as well as supply chain finance. SMEs that have access to electronic payment innovations are able to improve efficiency and margins.

A recent study of 50 US suppliers which included many SMEs showed that commercial card acceptance enabled an order-to-cash cycle that is 10 times or 34 days shorter than that of Checks, ACH, and Wire transfer, resulting in significant improvements in working capital requirements for the suppliers[25].

Another example of SMEs benefiting from global payments networks' infrastructure takes place in the e-commerce space. Chinese SMEs who sell through AliExpress.com now can easily accept international credit card payments of overseas buyers, who are often SMEs themselves. If not for this solution, the traditional trade finance products like Letter of Credit would be expensive and slow for the small quantities of goods sold through AliExpress.com.

SMEs in the travel industry have benefited from recent payment innovations. For example,eNett provides an innovative payment solution to small travel agencies who need to pay hotels and other travel suppliers. It uses a MasterCard technology that dynamically generates virtual card numbers to substitute for vouchers and transfers through checks or other expensive means. So, once a travel agency requests for a hotel room in a small hotel overseas, the payment is sent to the small hotel by a virtual card, and the hotel would have immediate access to the funds on confirmation. On the other hand, the travel agent is able to streamline the payment overseas without a complicated billing, exchange conversion, reconciliation, and payment process. This makes the process for the small travel agency and the small hotel far more efficient and faster.

Finally, electronic payments provide better information that is critical for prudent SME lending. Innovative payment players like Alibaba have leveraged their payments infrastructure to successfully expand into SME lending. By controlling credit risk through visibility on SME sales information, Alibaba's SME financing business has grown rapidly, and is well-received by its SME customers[26]

Summary

To ensure high growth rates, China needs to foster innovation in the economy. Our analysis shows that having SME's drive innovation in the economy is very efficient. The biggest obstacle to SME's ability to support innovation is access to financing. China needs to tackle 4 key issues in reducing the financing obstacles for its SMEs:

1. Create ground rules and discipline for large SOE financing that starves SMEs of market demand and bank financing
2. Build an SME banking focus by beefing up small local banks and by improving SME banking capabilities and motivations of large banks
3. Reform the currentinterest rate regime that guarantees healthy interest margin making lending to large SOEs very attractive financially for banks
4. Enable electronic payment innovations toreduce significant inefficiencies in the financial supply chain that are magnified for cross border trade

Based on global benchmarks, we recommend that China adopt a number of measures to help remove the obstacles China SMEs face. These recommendations will improve access to working capital and financial supply chain efficiency for SMEs.

Sources:

1. *An Analysis of Small Business Patents by Industry and Firm Size (2002-2006) by US Small Business Administration, Office of Advocacy, (2008)*
2. *Germany's, Federal Ministry of Economics and Technology(BMWi)*
3. *Analysis of Small Business and Jobs by US Small Business Administration, Office of Advocacy, (2010)*
4. *Economic Policy Institute, US*
5. *Institute for Local Self-Reliance*
6. *Chinese Academy of Social Sciences and China Association of Microfinance*
7. *Wikipedia*
8. *MasterCard Advisors Analysis and National Journal*
9. *Times Higher Education World University Rankings 2012-2013*
10. *Property Rights Alliance*
11. *China Economy Website*
12. *National Bureau of Economic Research*
13. *Purchasing Card Benchmark Survey,* RPMG Research 2010
14. *MasterCard Advisors Analysis, 2011 and 2012*
15. *CFO Research Services, 2012*
16. *Institute for Development Policy and Management, University of Manchester*
17. *Harvard Business School Research, 2012*
18. *China's National Bureau of Statistics*
19. *US Federal Deposit Insurance Corporation (FDIC)*
20. *Diagnose Mittelstand 2012, Deutscher Sparkassenund Giroverband*
21. *German Bankers' Association, www.germanbanks.org*
22. *The Economist, Oct 2012*
23. *JP Morgan Chase Plans Continued Support for Sound Lending and Regulatory Reform,* JP Morgan News Release
24. *Chase Tops $20 Billion in 2012 Small Business Loans,* JP Morgan News Release
25. *MasterCard and Kaiser Associates, Commercial Card Acceptance Cost-Benefit Study, 2012*
26. *Securities Times China*

Appendices
New Wave of Growth in China
—— Innovation through developing SMEs

PART 1: INNOVATION-RELATED INDICES AND RANKINGS

Global Innovation Index 2012 (Excerpts)

Country/Economy	Innovation Score(0-100)	Innovation Rank
Switzerland	68.2	1
Sweden	64.8	2
Singapore	63.5	3
Finland	61.8	4
United Kingdom	61.2	5
United States	57.7	10
Germany	56.2	15
China	45.4	34
Russia	37.9	51
Brazil	36.6	58

Source: Global Innovation Index 2012, World Intellectual Property Organization & INSEAD

Ease of Getting Credit Index (Excerpts)

Country/Economy	2011 Ranking	2012 Ranking
Singapore	1	1
United States	4	4
United Kingdom	6	7
Korea, Rep.	9	8
Germany	18	20
Japan	20	24
France	32	34
China	91	91
Russian	118	112
Brazil	128	130

Source: Doing Business2013, World Bank

Intellectual Property Rights Index 2012 (Excerpts)

Country/Economy	Ranking	IPR Score
Finland	1	8.6
Japan	4	8.3
United States	4	8.3
United Kingdom	9	8.2
Germany	11	8.1
France	17	7.9
Korea, Rep.	27	6.8
Brazil	53	5.5
China	59	5.2
Russia	79	4.8

Source: Property Rights Alliance

Top 100 World University Ranking 2012-2013 (Excerpts)

Rank	Institution	County/Region	Overall Score
1	California Institute of Technology	United States	95.5
2	Stanford University	United States	93.7
2	University of Oxford	United Kingdom	93.7
4	Harvard University	United States	93.6
5	Massachusetts Institute of Technology	United States	93.1
6	Princeton University	United States	92.7
7	University of Cambridge	United Kingdom	92.6
8	Imperial College London	United Kingdom	90.6
9	University of California, Berkeley	United States	90.5
10	University of Chicago	United States	90.4
12	Swiss Federal Institute of Technology Zurich	Switzerland	87.8
27	University of Tokyo	Japan	78.3
42	Karolinska Institute	Sweden	72.4
46	Peking University	China	70.7
48	Ludwig-Maximilians-UniversitatMunchen	Germany	70.4
50	Pohang University of Science and Technology	Korea	69.4
52	Tsinghua University	China	67.1
54	Kyoto University	Japan	66.8
59	EcoleNormaleSuperieure	France	65.9

Source: *The Times Higher Education*, *World University Ranking2012-2013*, Thomson Reuters

PART 2: KEY CHALLENGES FOR SMES

A. Access to Finance

SME loan share of total business loan

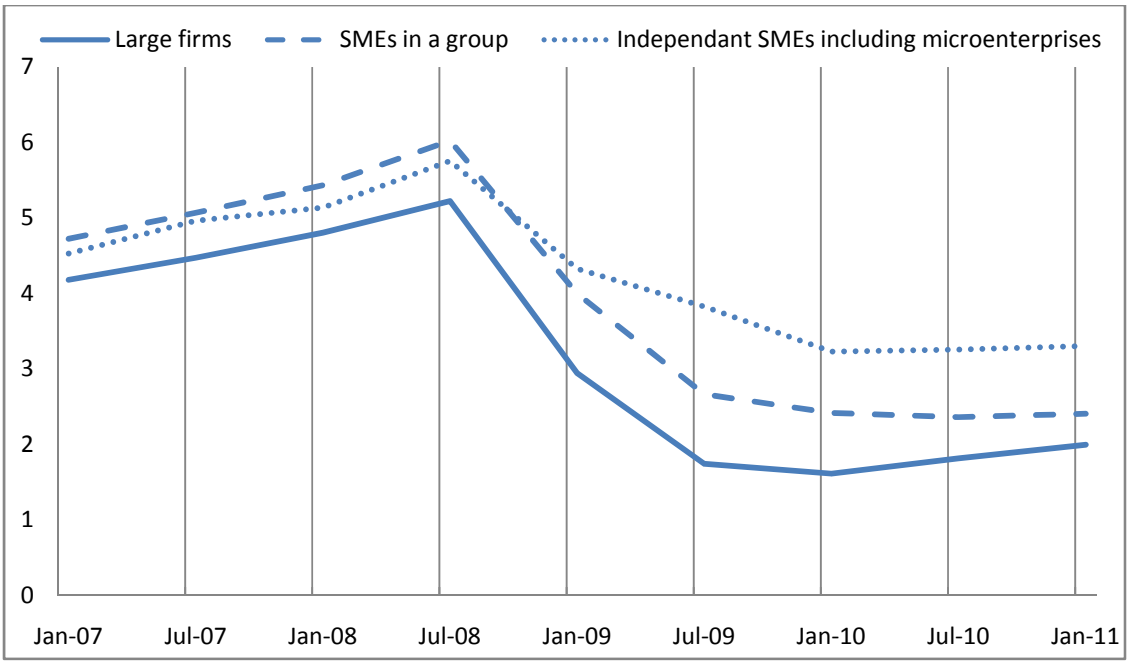
SME loan share of total business loans, [1] 2007-10
as a percentage of total business loans

Country	2007	2008	2009	2010
Canada	17	16	18	18
Chile	17	15	18	18
Denmark	12	9	9	11
Finland	27	22	20	14
France	26	26	26	26
Hungary	59	58	58	60
Italy	19	18	18	19
Korea	87	83	84	81
Portugal	78	78	78	77
Slovak Republic	63	74	76	--
Slovenia	57	56	55	50
Sweden	89	89	92	--
Switzerland	81	--	--	--
Thailand	28	27	27	38
United Kingdom	11	11	12	12
United States	30	28	28	29

Note: 1. Definitions differ across countries.
Source: Financing SMEs and Entrepreneurs, OECD Scorecard (2012)

Interest rates in France 2007-2011

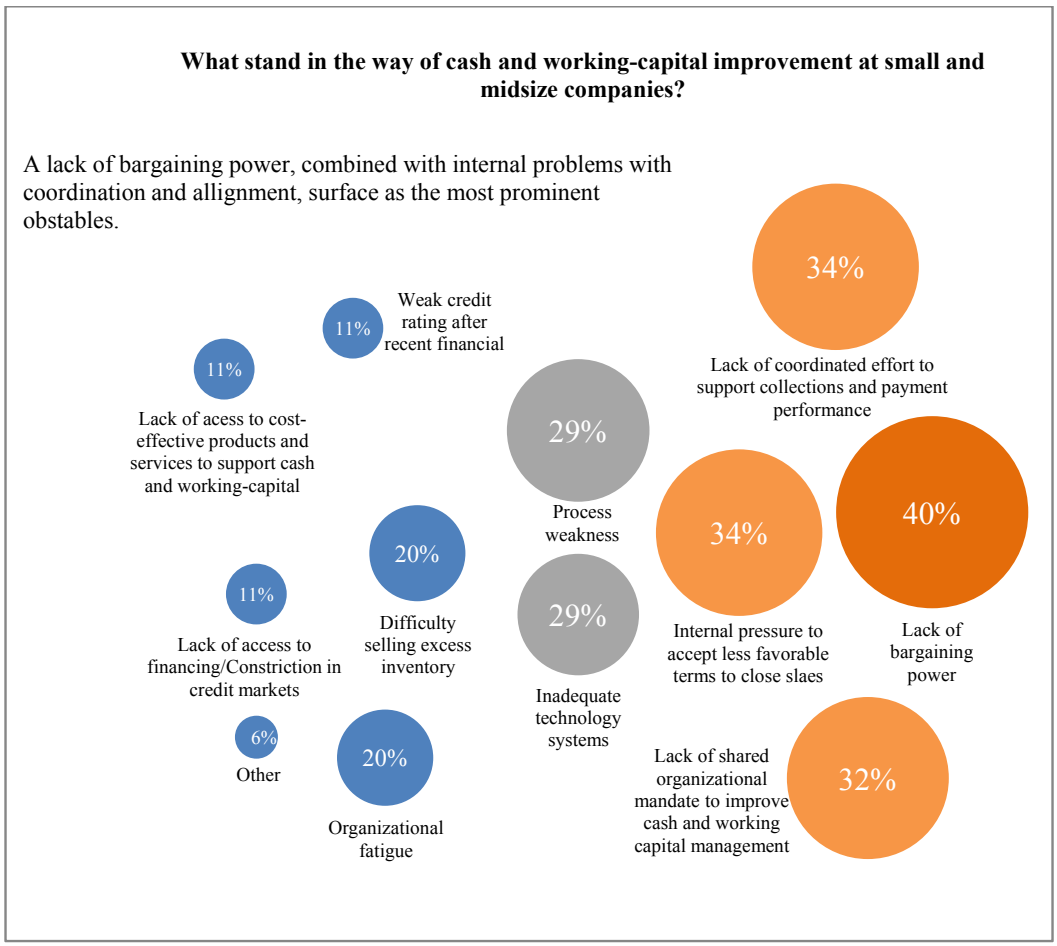
Interest rates in France, 2007-10
by size of firm, as a percentage



Source: Financing SMEs and Entrepreneurs, OECD Scorecard (2012)

B. Supply Chain Inefficiencies

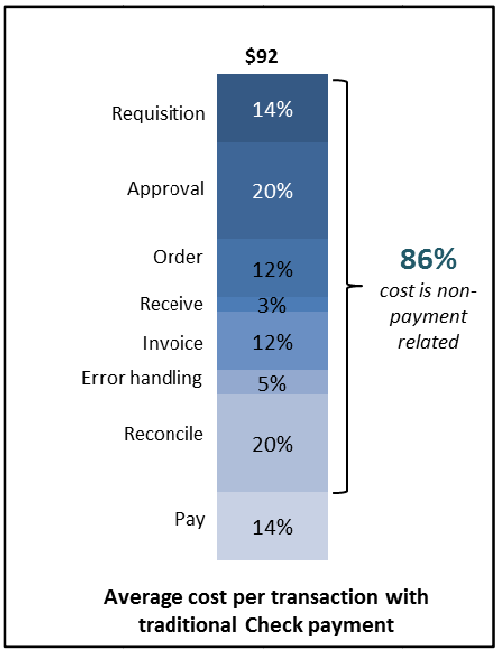
Concerns of US Finance Professional



Note: Respondents were asked to choose up to four barriers

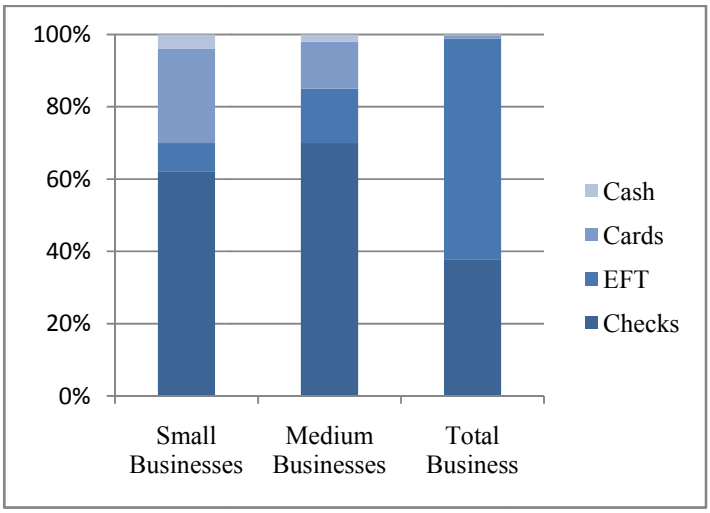
Source: CFO Research Services, 2012

Procure to Pay Process Inefficiencies (US Example)



Source: 2010 Purchasing Card Benchmark Survey, RPMG Research

US Business Payments Usage (Percentage of Dollar Value)



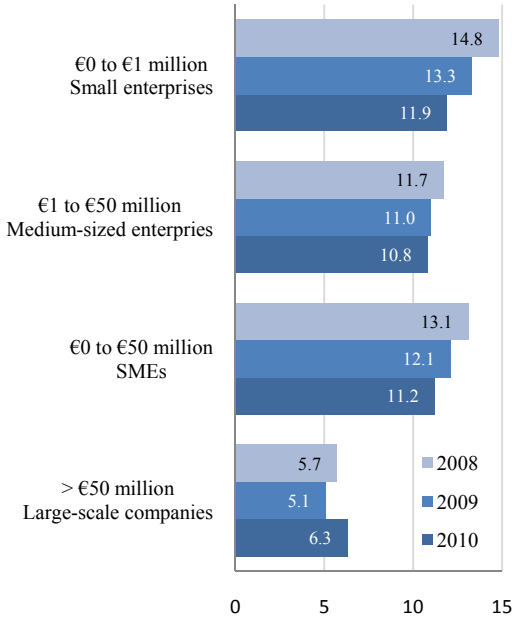
Source: MasterCard Advisors Analysis, 2011 and 2012

PART 3: GLOBAL EXAMPLES OF TACKLING SME CHALLENGES

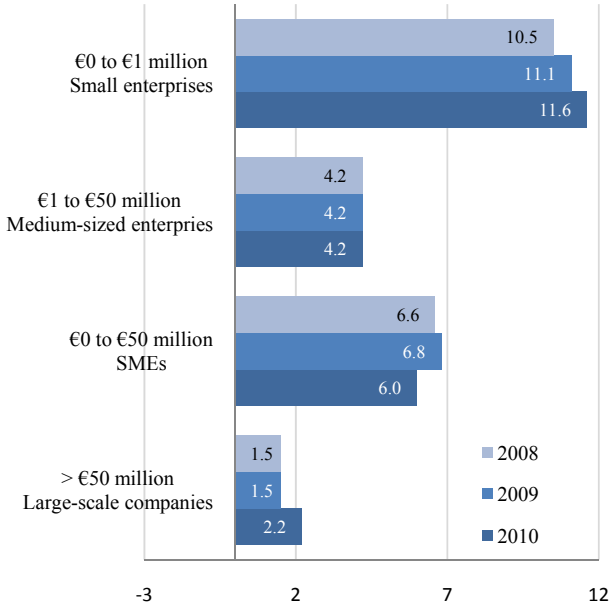
A. German Mittelstand Case Study and Its Supportive Local Banking Environment

Performance of the German Mittelstand

Return on Assets, 2008 to 2010
median values, as percentage, by turnover volume category

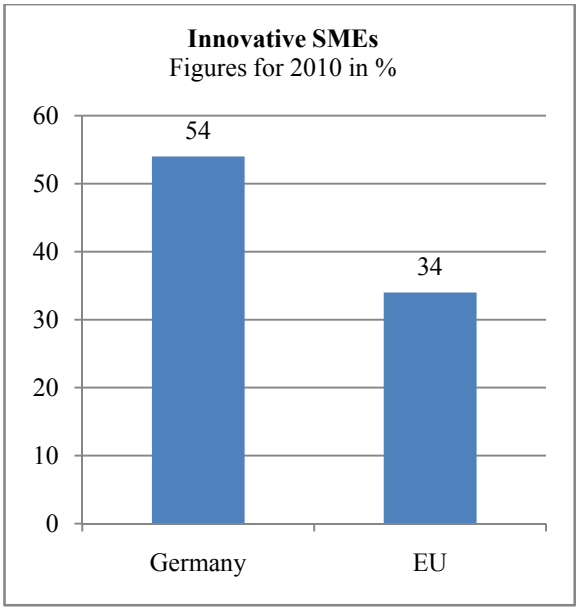


Return on Sales, 2008 to 2010
median values, as percentage, by turnover volume category



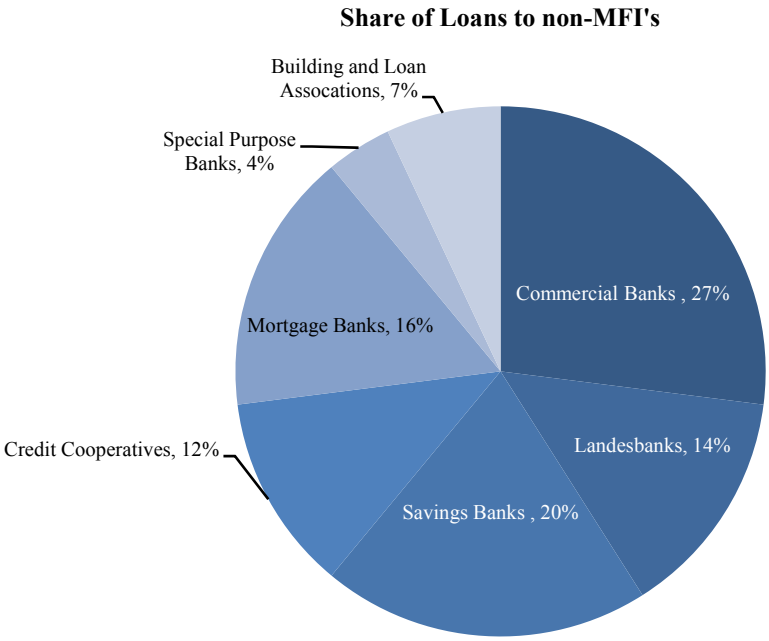
Source: Diagnose Mittelstand 2012, Deutscher Sparkassenund Giroverband

Innovation Edge of German Mittelstand



Source: Germany's, Federal Ministry of Economics and Technology (BMWi)

Germany's Local Banking Model

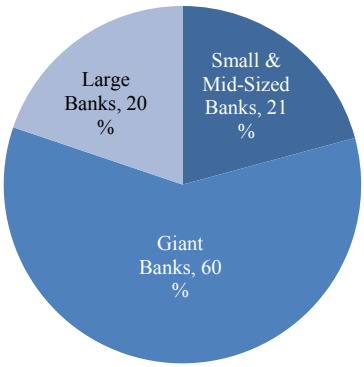


Source: German Bankers' Association, www.germanbanks.org

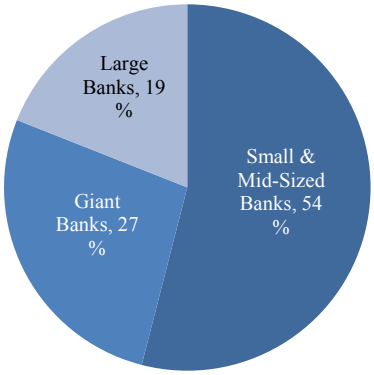
B. Banking Models In US and France

U.S. Bank Assets and Share of Small Business Lending 2012

Share of Bank Assets

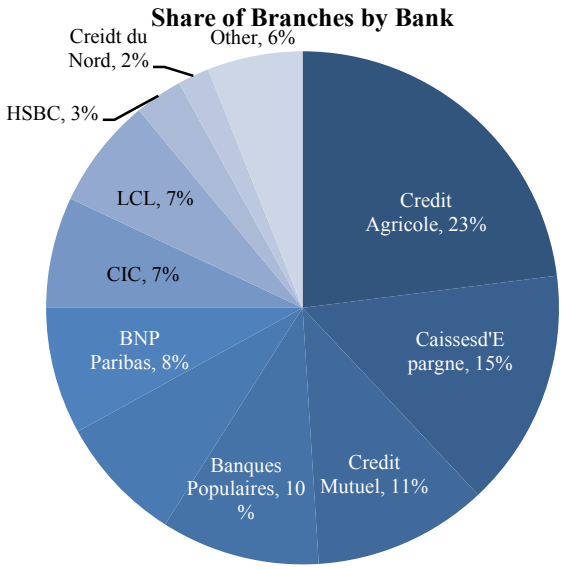


Share of Small Business Lending



Source: Institute for Local Self-Reliance, 2012

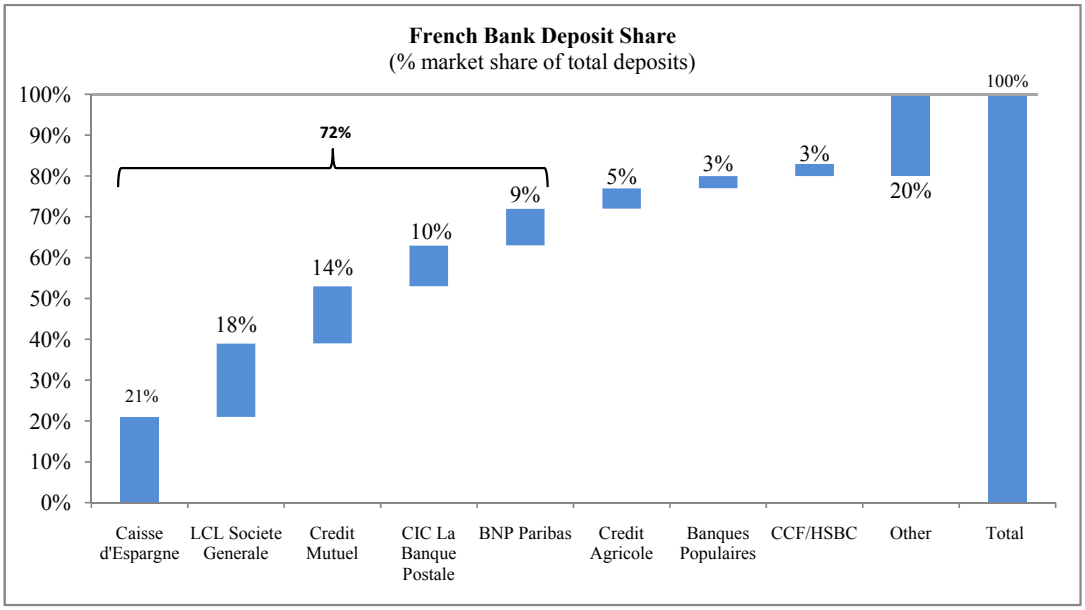
France's Banking Concentration



Note: With France being a heavily branch-banking country, the number of branches is representative of the penetration of various banks into the local markets.

Source: RBR; MasterCard Analysis

French bank deposit share



Source: World Retail Bank Report 2009; MasterCard Analysis

China Banking Landscape

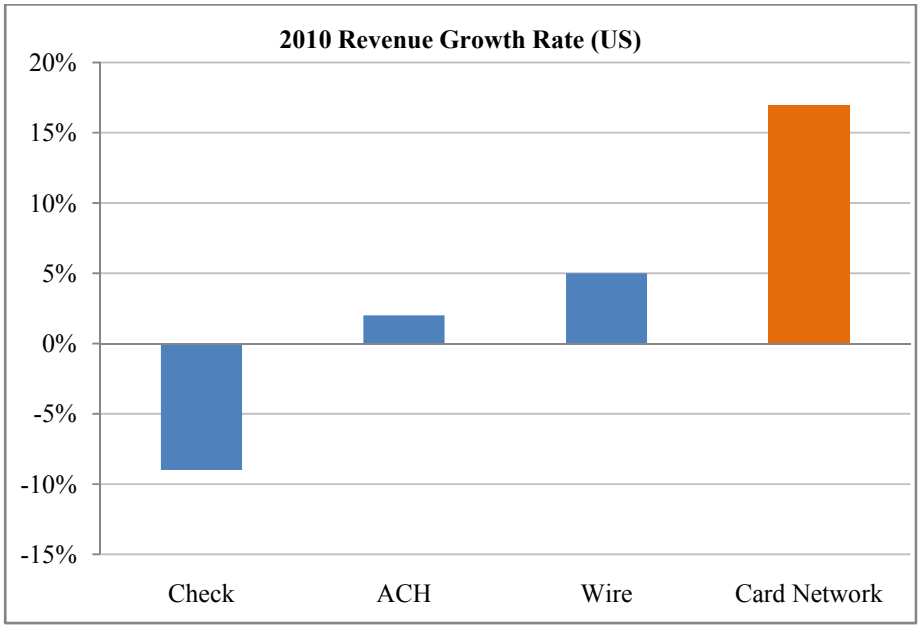
Assets held by state-controlled banks and other banks in China, 2009

	Assets Tril. RMB	Share
Policy banks	6.95	8.6%
State-owned commercial banks	39.04	48.5%
Joint stock commercial banks with state as largest shareholder	12.59	15.6%
State-owned or controlled banks	58.58	72.7%
Other commercial banks and credit unions	16.36	20.3%
Postal savings bank	2.70	3.4%
Non-bank institutions	1.55	1.9%
Foreign banks	1.35	1.7%
Others	21.96	27.3%
Total	80.53	100.0%

Source: An Analysis of State-owned Enterprises and State Capitalism in China, Andrew Szamosszegi and Cole Kyle

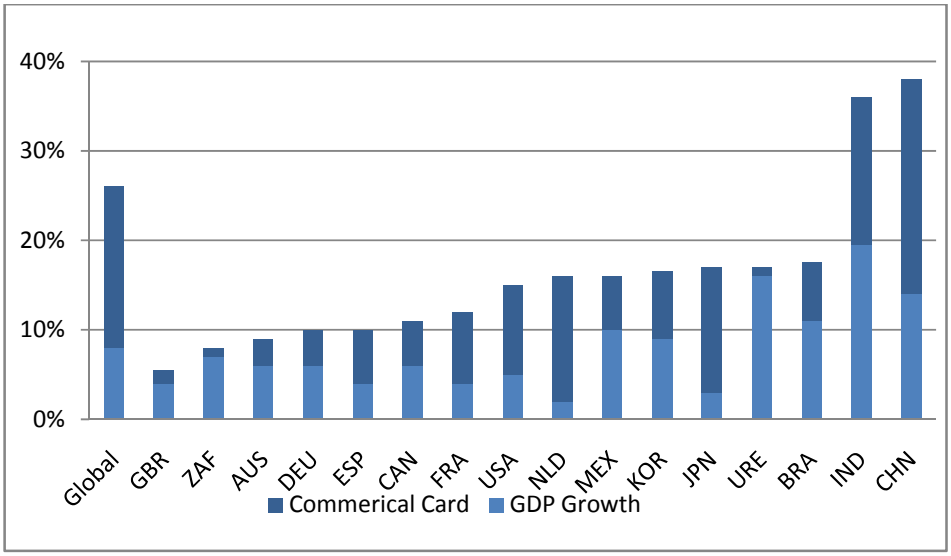
C. Payment Innovations That Supports SME

US Card network growth 2010



Source: Ernst & Young 2010; MasterCard Analysis

Commercial Card Network Solutions Projected GDV Growth (2010-2015)



Source: Glenbrook Commercial Card Sizing Aug 2011, EIU Forecasts Oct 2011, MasterCard Analysis 2012