Investment in Focus

Business investment confidence is on the rise, but how will businesses afford the investments they need to make to maintain competitiveness and take advantage of improving economic conditions?

SFS Research Study, June 2011
Table of Contents

1. Management Summary ................................................................. 3
2. Introduction ..................................................................................... 5
3. Credit Conditions – A Brief Review ............................................. 7
4. Investment Confidence and Actual Investment ....................... 10
5. Business Investment – Key Technologies and Financing Methods ...... 16
6. Conclusion ....................................................................................... 20
1. Management Summary

- The confidence of business to invest in new and upgraded equipment and infrastructure in Europe (including Turkey) and the USA has seen a marked rise at the beginning of 2011, according to the SFS Business Investment Confidence Index.

- Since 2007, a clear link has been observed in these countries between the SFS Business Investment Confidence Index described in this study and actual business investment trends reported by independent sources.

- The business investment confidence index represents a desire by companies to invest, yet a question mark remains over how business will access the finance to afford such investments in 2011.

- The 2011 edition of this study’s business confidence index shows a marked upturn. If the link between confidence and actual investment is maintained, then 2011/12 would be expected to see rising capital expenditure on business equipment and infrastructure in the countries studied.

- In fact, to the end of the decade, over €43 trillion of capital expenditure is expected to be required by the private sector, excluding property investments, in the eight countries studied – UK, Germany, France, Spain, Poland, USA, Turkey, and China.

- Since the supply of relationship credit from the commercial banking system remains tight, this raises the question of how growing rates of capital expenditure will be funded.

- Therefore, sources of credit may need to be widened to accommodate the expected increase in business demand for capital expenditure.

- Moreover, to afford the expected increased levels of investment in plant, machinery, equipment, businesses will need to explore a widening range of financing techniques.

- These financing techniques range from straightforward leasing of business equipment, to sophisticated project finance structures to fund whole facilities.
• In China, unlike Europe and the USA business investment rose between 2007 and 2010, regardless of the relative strength of business investment confidence.

• This may be taken as evidence of the fact that government has been driving the economy through investment, which in turn drives private sector investment.

• In the Chinese economy however, the authorities are concerned to drive investments in preferred sectors, as well as prevent economic over-heating, and have taken measures to restrain the supply of business credit.

• In addition, selected financiers are beginning to offer solutions that more closely align costs with earnings or savings, such as leasing-based products, in order to provide companies with appropriate financial solutions that facilitate commercially sustainable investments. However, the market is at an early stage, with these customised financing solutions mainly provided by specialist financiers.
2. Introduction

One of the most powerful indicators of economic health is the propensity and confidence of business to invest in capital equipment and facilities. As economies in the West strive to regain momentum, especially in the light of sovereign difficulties in some smaller European countries, commentators and economists are carefully watching business investment trends for signs of positive growth. When business is sufficiently confident to invest in new equipment, upgrades, energy-efficient alternatives or even whole new facilities, then economic observers will feel that global economic health is back on track.

Since the beginning of 2007, prior to the first effects of the recent financial markets crisis and its economic repercussions, the financial services division of Siemens (SFS) has been measuring business investment confidence through a model that combines stated investment outlook, along with forward views on business performance and economic trends, qualified by actual revenue and margin performance. In developed Western economies over the last four years, the resulting SFS Business Investment Confidence Index has been seen to closely mirror actual trends in business investment.

For most countries tracked in the Business Investment Confidence Index, the latest iteration of the Index reveals a marked upturn at the beginning of 2011, indicating that the national economies studied can expect a substantial increase in business investment over the next year or so. In most cases, the Index has returned to, or exceeded, the pre-crisis levels of 2007.

The Business Investment Confidence Index is, put simply, an indicator of the desire of business to make capital investments in equipment and facilities. With the tight credit conditions which remain in Western economies, there is a question mark over how such investments will be afforded, and which alternative sources of credit will need to be utilised in order to do so.

If, then, based on the historical close link between confidence and actual investment levels, the SFS Business Investment Confidence Index should indicate a likely pickup in investment in equipment and facilities over the next year, although that confidence would be tempered by the current situation regarding the availability of business credit. Analyses by Western central

The SFS Business Investment Confidence Index
The SFS Index of Business Investment Confidence embraces four key factors:
- The proportion of companies who have experienced growth in revenues and profits in the previous year.
- The proportion of companies expecting an upturn in revenues and profits in the coming year.
- The proportion of companies expecting an economic growth in the coming year.
- The proportion of companies expecting to increase their capital expenditure on equipment and facilities (excluding buildings) in the next twelve months.

The Index tracks these factors on a yearly basis with fieldwork taking place in the first quarter of the year in question.
banks reveal that, as a result of the 2007-2010 financial markets crisis, along with its economic repercussions, credit remains tight, in some countries is tightening still further, in others is easing only slightly. In contrast, central banks in rapidly developing economies such as China are taking measures to direct capital investment into preferred sectors, as well as to prevent economic overheating.

In which case, in the West, business investment confidence may not be enough on its own to result in a substantial upturn in actual investments made. During the recent years of tight credit availability, increasing numbers of businesses have been exploring alternative means of obtaining necessary finance to develop their businesses. These include, at the equipment level, various forms of asset finance such as leasing and renting; and at the larger facility level, project financing techniques.

This paper reviews the 2011 SFS Business Investment Confidence Index findings, examines their link with actual investment trends, describes current credit conditions in the countries studied, and describes some of the financing techniques being employed to enable business investment in 2011 and beyond.

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1. Ref, quarterly credit conditions reports from The European Central Bank, The Bank of England, and The Federal Reserve
2. Financial Times, China tightens liquidity to tackle inflation, 18 April 2011
3. Credit Conditions – A Brief Review

Any study in which the availability of business credit is an issue, should emphasize that there are several components in the credit price calculation. First comes the interbank rates which define the basic wholesale cost of funds. Next comes the lender’s own liquidity position, with available credit and loan conditions influenced strongly by this position and the lender’s consequent lending appetite. Finally, the credit decision also rests on ‘project risk’ – namely the complex of factors (market trends, trading strength, commercial performance, market position, etc) which help define the risk associated with the likelihood of the equipment investment delivering its intended benefits. Let us review the situation in the countries studied.

Beginning with the world’s largest economy, the latest report from the US Federal Reserve\(^3\) indicated that a modest net fraction of banks continued to ease standards and terms for Commercial and Industrial (C&I) loans. Compared with the previous report from the same institution, somewhat more banks reported having reduced spreads of loan rates over their bank's cost of funds, with about 45 percent of banks (net), trimming spreads on loans to large and middle-market firms and 30 percent (net), narrowing spreads on loans to small firms. Liquidity in the U.S. markets for large, highly rated companies may be at or near 2007 levels. However, one commentator notes that, “Cash, the lifeblood of business, has been scarce for middle market companies since the recession began in 2007.\(^4\)" Another well-known commentator adds, “The problem today is that most middle market borrowers are unable to access capital, and this liquidity challenge with $1.4 trillion forecasted by banks needs solutions.\(^5\)" Overall though, no significant change was noted in the U.S. business credit scene. Just as important, however, are rising input prices for U.S. firms\(^6\), that may put inflationary pressure on the economy especially if they cannot be absorbed by the manufacturing sectors and need to be priced in and absorbed by customers.

Eurozone banks reported a slight overall tightening of their credit standards on loans to non-financial corporations in the first quarter of 2011. The net percentage of banks reporting a tightening of their credit standards stood at 4% in the first quarter of 2011, compared with 0% in the previous quarter. In contrast to the previous survey round, this move was mainly driven by banks’ credit supply-side considerations related to access to market financing and by their liquidity positions. Other factors that contributed to the moderate tightening were perceptions about risks and the overall economic situation\(^7\).

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\(^3\) Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices, January 2011
\(^4\) KPMG, Middle Market Restructuring, 9 May 2011
\(^5\) HERMES CP, LLC., Streamlined process for commercial loan modifications in California, 16 May, 2011
\(^6\) Financial Times, U.S. profits set to suffer as commodity prices rise, 10 April 2011
\(^7\) European Central Bank, Euro area bank lending survey, April 2011
In the UK\(^8\), overall availability of credit to corporates was reported to have increased a little in 2011 Q1. But this increase was concentrated among large private non-financial corporations (PNFCs); availability to small businesses and medium-sized PNFCs was broadly unchanged, but lending volumes fell short of target\(^8\). Lenders expected availability to increase a little in Q2.

Poland is inevitably harnessed to the Eurozone’s fortunes and, although a rapidly developing economy, has felt the impact suffered by Europe, even if only in terms of a slowdown in growth. In Poland, in the last quarter\(^10\), the standards of granting loans to enterprises were slightly eased, except for long-term loans to small and medium-sized enterprises (slight tightening). In terms of lending policy, the majority of the banks kept the standards of granting loans unchanged, and at the same time lowered spreads charged on loans, and reduced collateral requirements.

Turkey and China are economies in high growth mode. In most, monetary policy is currently being implemented to stop growth running out of control.

Turkey’s central bank increased the reserves banks must deposit\(^11\) while keeping the benchmark interest rate unchanged, saying that tighter monetary conditions are needed to offset surging global oil prices. Turkey’s Central Bank Governor has also remarked that, “The Turkish economy is not overheating…but loan volume has been increasing strongly due to the robustness of the financial sector. Thus, our problem is slowing down the pace of lending\(^12\).” Turkish banks did not receive government subsidy during the crisis. The industry did not experience any liquidity issues and banks increased their profitability while interest rates declined.

In June, China has ordered its banks to raise the amount of money they hold in reserves\(^13\) in a further move to curb lending and cool inflation. This is the sixth such move this year by the central bank and follows six reserve increases in 2010. Lending and money growth has slowed steadily in recent months in response to the tightening steps after an extraordinary surge in bank credit in 2009 to counter the global financial crisis. Chinese banks issued a combined 17.5 trillion Yuan of new local currency loans in 2009 and 2010, almost a quarter of the economy’s total output during that time\(^14\).

\(^8\) Bank of England, Credit Condition Survey 2011 Q1
\(^9\) Daily Telegraph, UK banks miss first Project Merlin business lending target, 23 May 2011
\(^10\) National Bank of Poland, Senior loan officer opinion survey on bank lending practices and credit conditions, Q1 2011
\(^11\) Bloomberg, Turkey’s Central Bank Boosts Reserves, Warns of Inflation, 23 March 2011
\(^12\) Wall Street Journal, Turkey’s Central Bank Says Lending Needs to Slow, 14 January 2011
\(^13\) New York Times, China Steps Up Campaign to Fight Inflation, 14 June 2011
\(^14\) Reuters, China says money, credit growth in line with policy, 28 March 2011
In summary, Western banks are keeping their corporate criteria tight, and are only gradually easing lending conditions. Yet Western corporations are extremely keen to have access to capital in order to ride the crest of the wave of economic recovery. As a result, they are exploring alternative financing methods to standard corporate borrowing\textsuperscript{15} in order to meet the challenge of a tight credit market.

In rapidly developing economies, such as China and Turkey, the authorities are in many cases concerned about possible economic overheating and are applying pressure on the availability and cost of funds to counter possible racing inflation and inappropriate borrowing. At the same time, smaller firms are finding obstacles in their attempts to access credit across the globe: for instance, one analyst notes that, “in China, small private sector firms still suffer from capital shortages.”\textsuperscript{16}

Financing techniques being used to overcome this obstacle to finance will be described in the next section of this paper.

\textsuperscript{15} See, for instance: HBS-USC Conference, Alternative Financing in a Stabilized Economy, May 2010; Global Corporate Venturing, Funding Business Growth in an Age of Scarcity, February 2011; Davos 2010, Financing Low Carbon Growth.

\textsuperscript{16} China Analytics, Industrial Policy in China and the 12\textsuperscript{th} Five-year Plan, 12 October 2011
4. Investment Confidence and Actual Investment

The SFS Business Investment Confidence Index has been tracking confidence levels since early 2007, just prior to the advent of the financial markets crisis and the global economic repercussions that followed.

The Index not only captures the mood of businesses in these countries in relation to their likely business investment over the coming year, but also validates this confidence level with actual business growth in the previous twelve months along with a broad economic outlook for the coming twelve months. In this way, the Index embraces a measure of how solid the foundations of a confident outlook towards business investment really are.

Data for the Index was compiled from interviews with 1,000 businesses in each of the eight countries studied: the UK, Germany, France, Spain, the USA, Poland, Turkey and China.

A comparison between the Business Investment Confidence Index and actual Capital Expenditure\(^{(17)}\) by private sector companies reveals a close mirroring in most of the countries studied, particularly the USA, European countries and Turkey.

The Index therefore suggests that the UK, France, Germany and even beleaguered Spain should see an upturn in Business Investment (Capital Expenditure) over the coming year. It is important, however to note the actual Business Investment Confidence Index scores as well as their expected upward trend. Germany scores over 100 for 2011, indicating that business investment will return to, or even exceed, the early 2007 global average.

\(^{(17)}\) Data source: Global Insight
The same is not true of the UK and France. Although they exceed their own 2007 Index scores in 2011, they only score 83 and 93 respectively, lower than the global average Index score of 96 for this year. UK official statistics note that business investment in manufacturing is modestly growing, whereas non-manufacturing companies are reporting a decline. Similarly, in France, the overall business outlook is reported to be most positive in the industrial sector\(^{18}\), and manufacturing output has increased in all the early reported months of 2011.

In Spain, where fiscal consolidation is well under way, the upturn in the Spanish Business Investment Confidence Index should be viewed in the light of Spain’s absolute confidence

\(^{18}\) INSEE, French business climate still improves in March 2011
score which only languishes close to 80 for 2011. In addition, lenders have become somewhat cautious as business delinquency rates in Spain have soared, and this may also act as a suppressing factor on business investment. Nevertheless, private businesses domiciled in Spain, but with international markets, will undoubtedly be looking for financing methods that allow them to invest in the latest equipment and/or facilities and thereby seize the opportunities afforded by global, European and US economic recovery.

Germany is a strongly export-driven economy, and so the buoyancy of major world markets in Asia and elsewhere may have influenced the country’s Investment Confidence Index position. Certainly it is a fact that Germany’s investments in plant and equipment increased over 9% in 2010\(^1\). The UK economy’s dependence on the Financial Services sector\(^2\) could explain why recovery and investment confidence is lower than Germany. Similarly, in France, public sector deficits (such as that in the health sector) are only now being dealt with, and may ensure that private sector investment growth is more gradual than that experienced by its near neighbour Germany. Like Germany, both the USA and Turkey have already experienced an upturn in business investment in 2010\(^3\). In the USA, this does however, follow a deep fall between 2008 and 2009. Interestingly, U.S. business investment is not only going into domestic operations, but is also being pumped into U.S. joint ventures in China\(^4\).

\(^1\) Financial Times, German groups ratchet up spending to meet demand, 24 January 2011
\(^2\) Eurostat, Financial and insurance services (NACE Section J). Share of value added and employment in the business economy (NACE Sections C to K), 2006 (%).
\(^3\) See, for instance, Fitch Ratings, U.S. Capital Expenditure to post modest growth in 2010 and 2011, 3 May 2010; KPMG, Global Business Outlook Survey, Capital Expenditure, Winter 2010
\(^4\) CNN Money, U.S. Companies dump billions into China, 20 January 2011
Turkey has been affected by the world global economic slowdown over the last few years. Nevertheless, if actual investment in plant and equipment continues to follow the trend shown by the SFS Business Investment Confidence Index, then Capex level may surge in 2011 to exceed the highs of 2007. One commentator, noting an above-estimate 9.2% growth in Turkish GDP for 2010, added that “Turkey’s expansion was driven largely by private sector consumption and investment.”

Poland presents a somewhat different picture. In this case, the Business Investment Confidence Index appears, if anything, to be a lead indicator of capital investment. An upturn in capital expenditure in 2011 is corroborated by the Deloitte Business Sentiment Index which
reported a net 50% of Polish companies expecting to increase Capex across the year\textsuperscript{23}. Furthermore, according to a survey for the Polish Confederation of Private Employers (PKPP)\textsuperscript{24}, 51% of Polish companies are focusing their investment on ‘modernising production facilities’.

Finally, we turn to the Asian giant – China. Here, the link between Business Confidence index and actual business investment is less clear. In fact, the picture from the last few years seems to be that investment continues regardless of the relative strength of investment confidence.

\textsuperscript{23} Deloitte, Business Sentiment Index, October 2010
\textsuperscript{24} Polish Market Review, Big firms continue to invest in 2010-11, 8 November 2010
China is putting large sums into infrastructure development, including power, water and healthcare. The country has invested RMB850bn between 2009 and 2012 into just the first phase of a rural healthcare access infrastructure\(^{25}\), and two new power stations are being built every week to accommodate the demands of industrial growth.

However, once these substantial state-sponsored developments have been completed, it is expected that business capital investment would start to more closely mirror the Business investment Confidence Index, as it does in mature Western economies.

<table>
<thead>
<tr>
<th>Country</th>
<th>Capital Investment (excluding real estate) - in million Euro</th>
<th>Business Investment Confidence Index</th>
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<tbody>
<tr>
<td><strong>UK</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>2007</td>
<td>2008</td>
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<tr>
<td>Capital Investment (excluding real estate) - in million Euro</td>
<td>127,515</td>
<td>118,364</td>
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<tr>
<td>Business Investment Confidence Index</td>
<td>74</td>
<td>70</td>
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<tr>
<td><strong>Germany</strong></td>
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<tr>
<td></td>
<td>2007</td>
<td>2008</td>
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<tr>
<td>Capital Investment (excluding real estate) - in million Euro</td>
<td>221,865</td>
<td>232,226</td>
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<tr>
<td>Business Investment Confidence Index</td>
<td>91</td>
<td>97</td>
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<tr>
<td><strong>France</strong></td>
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<tr>
<td></td>
<td>2007</td>
<td>2008</td>
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<tr>
<td>Capital Investment (excluding real estate) - in million Euro</td>
<td>173,447</td>
<td>176,882</td>
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<td>Business Investment Confidence Index</td>
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<td>86</td>
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<tr>
<td><strong>Spain</strong></td>
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<td></td>
<td>2007</td>
<td>2008</td>
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<td>Capital Investment (excluding real estate) - in million Euro</td>
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<td>127,110</td>
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<td>Business Investment Confidence Index</td>
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<td>68</td>
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<td><strong>Turkey</strong></td>
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<td></td>
<td>2007</td>
<td>2008</td>
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<td><strong>Poland</strong></td>
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<td></td>
<td>2007</td>
<td>2008</td>
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<td><strong>China</strong></td>
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<td></td>
<td>2007</td>
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<tr>
<td>Business Investment Confidence Index</td>
<td>80</td>
<td>85</td>
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</tbody>
</table>

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\(^{25}\) China Daily, China invests heavily in building medical insurance system, 24 December 2010
5. Business Investment – Key Technologies and Financing Methods

The SFS Business Investment Confidence Index is generally highlighting a potential upturn in capital investment over the next year. This paper discusses the extended range of financing techniques that will need to be employed if businesses are to access the required funding to make these investments. However, for the discussion of financing methods to be meaningful for business managers, the next section of this paper looks at a number of key technologies in order to illustrate a selection of equipment or facilities that businesses are looking to fund.

In financing, the cover-all term for equipment or facilities being funded is an ‘asset’. An asset could be anything from a piece of office equipment, through to an industrial production line, or even a whole facility like a waste disposal plant. Each requires its own form of financing arrangement.

The key point is that for the remainder of the decade, businesses in the eight countries studied in this report will require in the region of €43 trillion to meet their predicted capital investment requirements. Yet relationship credit to fund this capital investment in the Western world is scarce, and some commentators have raised the question as to whether financiers balance between relationship and transactional lending is undergoing long-term change. Therefore alternative financing methods have an important future role for businesses seeking to realise their investment ambitions and indeed financiers looking to provide such finance – including techniques such as leasing and renting which are secured as much on the asset, as on the business’s credit standing. Moreover, following several years of fluctuations in the price of credit, businesses are understandably attracted by financing methods which secure an alternative, predictable level of monthly payments for the whole financing period (safe from market and economic volatility), and which cannot be foreclosed during that period so long as payments are maintained. By spreading capital expenditure in this way, the need for periodic outlay of large sums is reduced, by definition therefore increasing the funds available for operating expenditure.

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26 Source: Global insight; see also Centre for Public Policy for Regions, Scotland’s Capital Challenge; Edison Foundation, Transforming America’s Power Industry, 2010
27 ECB, Quarterly survey of bank lending, April 2011
29 Bank involvement with SMEs; beyond relationship lending, Journal of Banking & Finance 34 (2010) 2280–2293
Access to up-to-date technology is critical to competitiveness. This business fact of life has been underscored by many studies over the last twenty years. In the manufacturing sector, industrial productivity is critical to competing in supply chains across a globalised economy, and that productivity is mainly dependent on underlying technologies. In services sectors, human productivity is hugely enhanced through access to the latest technological innovations, as is access to the widest possible talent pool through flexible and remote working practices.

In healthcare, the latest technology enables faster, more accurate diagnosis and treatment, while transport and logistics networks are able to deliver just-in-time economies through technological innovation. The blessing, and the possible financial curse, of the twenty-first century, is that technological innovation has accelerated hugely compared to previous decades. Engineering, IT, nanotechnology and communications innovations are transforming the ‘possible’ for business and consumer alike at an increasing pace. Being able to afford the increasingly regular technological upgrades is the main theme of this report. In addition, the increasing pace of technology replacement is encouraging businesses, and their financiers, to look for ways of avoiding the accumulation of funds tied up in capital expenditure (‘frozen capital’) over time. Equipment replacement periods are unlikely to lengthen once again, so a strategic change in financing outlook is required to stay competitive in the foreseeable future.

Three issues are at stake, when considering an investment in new or upgraded equipment – efficiency, productivity and business extension. In other words, will the new equipment bring down production costs, will it extend production capacity, and will it allow the business to move into new or adjacent markets.

Across business and industry, one particularly topical investment trend is around energy efficient technologies, especially because investment in energy efficient technologies can fulfil all three key criteria – reducing costs, increasing productivity and allowing business extension. The industrial sector uses massive amounts of energy, and is therefore best placed to reap the financial rewards of lower energy consumption. The very substantial savings can be made by upgrading to low-energy technology alternatives. It also provides the financier with the opportunity to create financial structures, usually involving some kind of leasing arrangement, that allow energy-efficient upgrades to be financed from the energy cost savings that they enable.

Typically, energy-efficiency is focused on two major technology areas: heating, ventilation and air conditioning (HVAC); and industrial motors or drives. In the field of HVAC, the most

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31 European Environment Agency, Global Megatrends, European Environment State and Outlook 2010
forward-thinking financing arrangements would typically involve some form of ‘performance contracting’, where an audit of the organisation’s likely savings on energy costs is then used to structure a scheme where it pays for the upgrade investment. HVAC, whether applied to an industrial or an office building, often forms part of an overall buildings automation solution, which intelligently controls a wide choice of different building control disciplines like heating, ventilation, air conditioning applications, lights and blinds, up to safety features, and equipment.

Just as significant, however, for industrial organisations’ energy-saving initiatives are drives and motors (sometimes themselves part of an industrial HVAC or waste product extraction system), as they are major consumers of power, and can therefore provide rapid payback from energy cost savings.

Worldwide, there are approximately 20 million industrial motors—with vast potential for saving energy\textsuperscript{32}. The cost of the equipment accounts for less than 5% of total costs over the lifetime of the equipment, whereas energy costs are in the region of 95%. Drive technology accounts for two-thirds of this amount\textsuperscript{33}. The largest industrial consumers are compressors, conveyor belts, other materials handling, and mixing and milling systems, as well as pumps for heating, ventilation and air conditioning. When viewed in the context of total costs, the acquisition price becomes a relatively insignificant factor. Factor in a financing option that allows the new drives to be paid for on a form of pay-to-use basis, and the energy cost savings are effectively paying for the acquisition cost, at an affordable rate, and without tying up scarce capital.

Nor are industrial firms always having to look at total replacement of a production line. Financing arrangements can also be put in place to fund retrofit projects, where drives are replaced with more energy-efficient alternatives, but the larger part of an industrial system can be retained.

Power generation is also coming in for major investment across the world, whether at the macro or the micro level. In the rapidly growing Asian giant – China – demand for energy is forcing a staggering rate of energy generation growth. China is reputed to be building two new coal-fired power plants per week as it aims to meet its target of 590 power plants built between 2007 and 2012\textsuperscript{34}. Large power facilities might be funded through some form of project finance scheme, where the long term financing of a project is repaid from the cash-flow of that project, typically within special purpose companies or joint ventures (“SPC”) with interested parties. Project finance, sometimes referred to as debt financing, is different from

\textsuperscript{32} Source: European Copper Institute  
\textsuperscript{33} Source: Siemens  
\textsuperscript{34}  
BBC, China building more power plants, 23 June 2007; Institute for Policy Studies, Foreign Policy in Focus, 16 January 2007
asset finance because the financer principally looks to the revenue and profits generated by
the project in order to secure and service the loan.

Local power generation is also tied up with the more efficient processing of industrial waste. Micro power plants are being sited close to major manufacturing complexes in order to prevent waste having to be transported to a remote site, thereby consuming unnecessary fossil fuels and generating large quantities of CO$_2$. However, such micro power plants are of too small capacity to be interesting to the major utilities, and therefore tend to be developed by smaller businesses. These smaller, often younger businesses, that typically have relatively poor access to capital, need to find financial arrangements that allow them to fund the development of these facilities in the first place. As the sector has developed, financing arrangements have been created to facilitate micro power generation, which are designed to lend against the facility’s future cash flows.

Key influencers in the financing market for business and industrial equipment – whether standard power consumption or highly energy-efficient - are specialist financiers that often themselves have a technology background. For many specialist financiers, a high proportion of their business comes from financing third party equipment, especially in the energy-efficient equipment market which has a high proportion of specialist equipment manufacturers. The advantage that these financiers have over non-specialist finance providers (such as banks) is that their technical knowledge allows them to more accurately assess the role that all types of equipment will play in the client business, along with the robustness of each client’s business plans, payback models, etc. This knowledge also allows them to more accurately equate the benefits of the use of the equipment through its lifecycle and factor that into the financing arrangement.
6. Conclusion

This paper has demonstrated that the SFS Business Investment Confidence Index has largely mirrored actual rates of business investment since early 2007. The general upturn in the Index seen in its 2011 iteration would therefore strongly point to an increase in actual business investment volumes as the year progresses. However, since credit conditions remain tight, businesses will need to utilise the full range of credit sources available to fund these desired investments.

In order to stay competitive across the decade, businesses in the West and the East want to acquire the latest technologies to reduce overheads, increase production rates and improve competitiveness. However, the predicted Capex requirement of businesses in the eight countries studied, leaving aside property investments, is staggeringly high – in excess of €43 trillion. In order to afford these investment, a number of leading company financial managers are exploring a wide range of additional financing arrangements35 – including asset-finance techniques such as leasing and renting – to acquire the technology they need. By doing so, they are managing to protect themselves from market and banking volatility, and are entering into arrangements that closely align outgoings with earnings resulting from the equipment investment.

35 For instance: ABFA, Asset-based Finance Grows for Third Consecutive Quarter, November 2010