

The 'AR Factor'

The economic value of Accounts Receivable
Finance to Europe's leading economies
October 2011



GE imagination at work

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Executive Summary

The purpose of this report is to assess the benefits that Accounts Receivable (AR) finance brings to Europe's four largest national economies as well as the individual businesses it funds. It aims, for the first time to *quantify* how current levels of AR finance are contributing to economic output and gauge how increased usage could further improve national economic performance.

The current value of AR finance to Europe's key economies is significant and the potential value that higher levels of uptake could unlock is even greater. The econometric modelling undertaken for this report reveals that by 2020, at current rates of growth and usage, just under €59 billion of combined quarterly GDP across France, Germany, Italy and the UK and 1.66 million jobs would be reliant on the existence of AR finance.

Perhaps more importantly, should AR finance usage increase to higher levels of uptake the impact on future growth could be vast. By 2020, under this scenario, the combined GDP of those four nations could grow by an additional €53 billion per quarter and an additional 937,000 jobs could be created.

Spotlight on Accounts Receivable Finance

What is Accounts Receivable finance?

AR Finance involves companies accessing finance either secured against invoices or accounts receivable, or through selling those invoices to a third party. There are two well-known types:

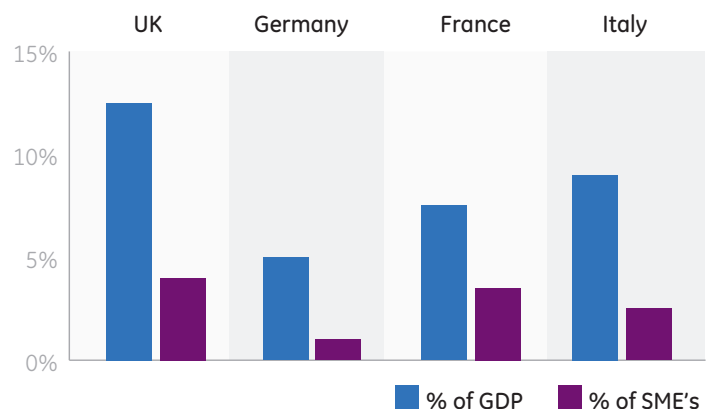
Invoice Discounting allows a business to draw money against its sales invoices before the customer has actually paid. To do this, the business borrows a percentage of the value of its sales ledger from a finance company, effectively using the unpaid sales invoices as collateral for the borrowing.

Factoring is a financing tool that allows a company to get invoices paid in days. It provides companies, typically SMEs, with the working capital to operate the business, pay suppliers and grow. Factoring involves selling your invoices at a discount for immediate cash. The factoring company waits to get paid, while the company using it gets immediate use of the funds.

In total, AR lending volume across Europe in 2010 was €989,951 million¹. According to the EU Federation of Factoring and Commercial Finance, this number equated to 8.43% of total EU GDP in 2010. AR finance offers a number of distinct advantages to businesses over traditional credit. These include the provision of very short-term funding, without the need for businesses to provide supplementary guarantees; the improvement of cash-flow because of the shorter lead times involved in obtaining cash through AR finance; flexibility over how the finance is used, thus providing the ability to meet immediate needs and easier access through a much more simplified

application process. AR finance also offers protection against unpaid invoices. At an industry level, the manufacturing sector is a leading exponent of AR to finance growth and weather a financial storm.

Figure 1 - AR Finance Penetration



Although it is becoming increasingly recognised as a positive alternative to traditional bank credit, AR finance has not been a widely used form of financing compared to other instruments:

- In the UK the Asset Based Finance Association (ABFA) estimates that 42,000 of the UK's one million SMEs² use AR Finance
- This means that penetration is just 4.1% in terms of number of UK businesses
- However total GDP penetration – the proportion of GDP that is financed through AR – is much higher at an estimated 13.34%
- In France 35,217 companies used AR finance in 2010³ representing 3.1% of all French SMEs⁴
- While in Germany, despite factoring accounting for over 5%⁵ of the country's 2010 GDP, just 12,000 companies used factoring,
- This represents less than 1% of all German SMEs⁶
- In Italy, 37,000 companies – a little under 2% of all SMEs – use AR finance but 9.78% of GDP is "factored".

Methodology Overview

In order to assess the benefits and quantify the economic impact of AR finance, GE Capital looked at its impact across four major markets: the UK, France, Italy and Germany.

The findings are based on an in-depth review of data on lending and other asset-based activity; economic and finance statistics and commentary from central banks and governments; proprietary data from GE Capital on trends in the usage of AR finance products; interviews with relevant business and finance industry networks and government organisations; and over 50 businesses who currently utilise AR financial products.

Drawing from these findings and insights, an econometric model to quantify the wider economic benefits to each economy of current and future usage of AR finance instruments was deployed to consider a number of scenarios over the short, medium and long-term periods.

¹ <http://www.euf.eu.com/total-factoring-volume/facts-and-figures/total-factoring-volume/menu-id-24.html>

² Based on the Department for Business, Innovation and Skills data for 2009 indicating that the number of companies with between 2 and 250 employees in the UK was 1,02m

³ <http://www.asf-france.com/statistiques/Activiteadherents/201012-Activite-affacturation.pdf>

⁴ Based on INSEE data for 2009 indicating that the number of companies with between 2 and 250 employees in the France was 1,19m

⁵ <http://www.factoring.de/factoring-aktuell-english/fac-market-2010>

⁶ Based on ifM Bonn data for 2009 indicating that the number of companies with between 2 and 250 employees in Germany was 1,2m

The models that underpin the analysis are based on extensive economic, financial, businesses, labour market and demographic data for each of the four EMEA countries. One econometric model is deployed for each of the four EMEA countries that are the subject of this report. The models work by disaggregating industrial sectors, factors of production, household and government expenditures, as well as foreign trade and investment for each of the four countries.

More detail on the creation of this model and detailed outputs can be found on page 6 of this report.

THE AR FACTOR

Advantages of Using AR Finance

Provision of very short term funding – allows for very short term financing without businesses having to provide supplementary guarantees

Improvement of cash-flow – the period for obtaining cash through AR financing is shorter than through credit

Flexibility over use of finance – factoring allows for funds to be used to meet whatever the immediate needs of the business are

Easier application process – the number of documents required during the AR financing process is usually considerably less than for regular bank credit.

Protection against non-payment of invoices – for factoring the risk of non-payment is entirely transferred to the factor

The Value of AR Finance

As well as the positive impact of current and expanded use, the study also examines how reliant these economies are on existing AR finance provision to fund expected growth in economic output and employment. The output of our model shows that if AR finance were not available to companies in the countries examined and the benefits of its use were stripped out, all four economies would be critically impacted and experience restricted future growth.

In order to demonstrate the value of AR finance to the four economies examined in this report we looked at the impact if AR finance was to be withdrawn immediately from each economy. Given the scale of AR finance and its importance as a source of working capital and even considering the availability of alternative forms of finance, our model shows that the major European economies would see an immediate and significant impact: across the four economies, €16.92bn would be wiped off the combined GDP in the fourth quarter of 2011. By the fourth quarter of 2015 the aggregate value of GDP that would be reliant on AR finance rises to €29.71bn and over €58.61bn by 2020.

Jobs would also be lost. Today, just over 100,000 jobs in France, Germany and Italy respectively are underpinned by the availability and use of AR finance, whilst in the UK, that number is closer to 260,000. By 2015, factoring in current economic growth and the role that AR plays, over 220,000 jobs in Italy would be reliant on the existence of AR finance whilst in Germany and France the number would be just over 175,000 and 180,000 respectively.

Jobs Reliant on AR Finance in Key European Economies			
	2011	2015	2020
UK	258,000	356,000	543,000
Germany	108,000	176,000	322,000
France	112,000	181,000	331,000
Italy	123,000	228,000	460,000
Total	601,000	941,000	1,657,000

For example, in Germany by 2020 the value of AR finance to the economy would be over €18bn per quarter including the current impact and the restriction on growth that our model suggests would be seen. Put simply, should AR finance be withdrawn today the economy of Germany would be almost 3% smaller in 2020.

Value of AR Finance to Key European Economies						
	Q4 2011		Q4 2015		Q4 2020	
	Contribution to Quarterly GDP	% of Quarterly GDP	Contribution to Quarterly GDP	% of Quarterly GDP	Contribution to Quarterly GDP	% of Quarterly GDP
UK	€6.06bn	1.84%	€8.46bn	2.29%	€13.17bn	3.19%
Germany	€3.15bn	0.57%	€7.62bn	1.34%	€18.24bn	2.84%
France	€3.95bn	0.96%	€7.38bn	1.66%	€15.3bn	3.19%
Italy	€3.76bn	1.24%	€6.25bn	1.95%	€11.9bn	3.49%
Total	€16.92bn	1.04%	€29.71bn	1.71%	€58.61bn	3.13%
UK* (£)	£4.91bn		£6.85bn		£10.67bn	

*UK Sterling conversion based on real effective exchange rates April 2011

The Benefits of Wider Adoption

Based on the outputs of the model, all four European economies could see significant benefit from the wider adoption of AR finance.

There are a number of barriers to wider adoption of AR finance that have so far limited penetration across Europe. Should these barriers be overcome the number of companies using AR could rise threefold in the case of France and more than that in the case of Germany.

Figure 2 - Current uptake versus potential wider usage of AR Finance⁷.

No. of businesses	UK	Germany	France	Italy
Current	42,000	12,000	35,000	37,000
Potential	105,000	125,000	100,000	105,000

Based on consultations with factoring associations in each of the four markets which are the focus of this report, there is a consensus that 6-10% of businesses in each market not currently using AR Finance are eligible and would find it beneficial to do so this equates to 15-20% in terms of GDP.

The additional flexibility available to businesses using AR would potentially lead to improved cash flow and working capital buffers, in turn allowing businesses to meet demand are to expand and grow more efficiently. This would at first have a modest impact on the economy and employment situation in each market, however, over time this could compound to create very real bottom line impact.

By the end of 2015, the French economy could grow by an additional €4.4bn per quarter and by 2020 this could increase to an additional €13.5bn per quarter – meaning that the economy could grow by an additional 2.8%. In Germany the impact could be higher due to the relatively low penetration of AR finance usage today compared with the UK and France, with the economy expected to grow by an additional 2.9% by the end of 2020.

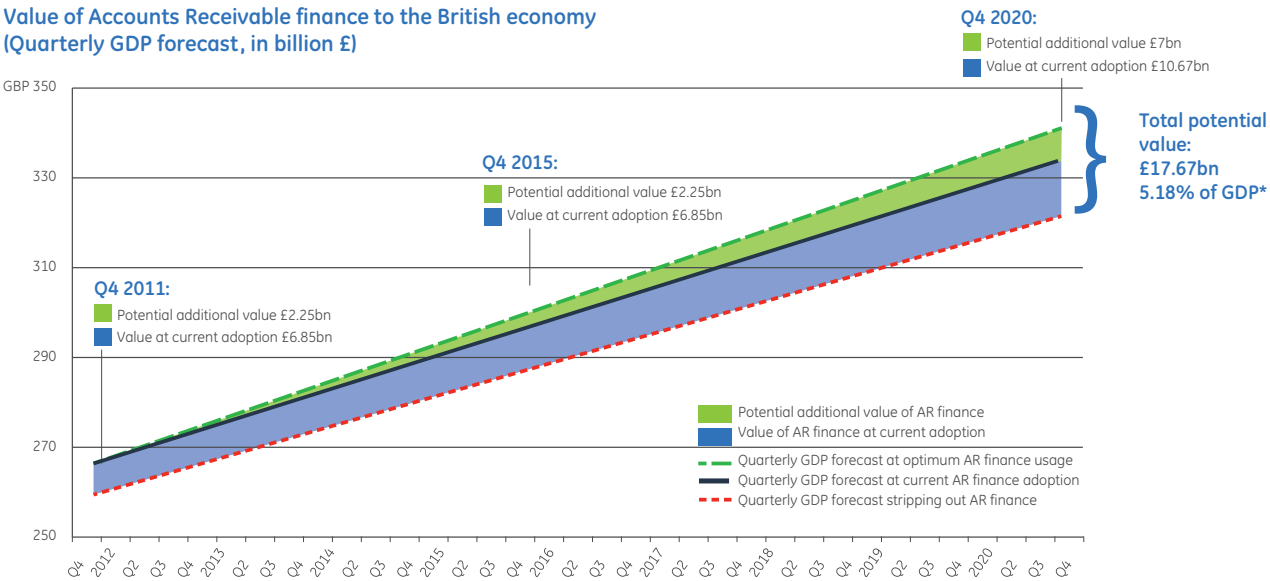
This could also support a significant growth in the number of jobs available in those economies. The UK economy, for example, could grow by an additional 2.09% per quarter and that growth could lead to the addition of more than 300,000 jobs.

Potential New jobs deriving from the "Optimal" AR Finance Usage			
	2011	2015	2020
UK	10,000	92,000	311,000
Germany	9,000	68,000	222,000
France	6,000	52,000	170,000
Italy	8,000	70,000	234,000
Total	34,000*	282,000	937,000
<i>*NB. This figure appears as 34,000 due to rounding to the nearest thousand. 34,000 is correct</i>			

Potential Growth – Economic Impact of "Optimal" AR Finance Usage						
	Q4 2011		Q4 2015		Q4 2020	
	Additional Quarterly GDP	Additional Quarterly GDP (%)*	Additional Quarterly GDP	Additional Quarterly GDP (%)*	Additional Quarterly GDP	Additional Quarterly GDP (%)*
UK	€0.54bn	0.17%	€2.77bn	0.75%	€8.63bn	2.09%
Germany	€1.23bn	0.22%	€6.12bn	1.03%	€18.62bn	2.90%
France	€0.91bn	0.22%	€4.42bn	0.99%	€13.48bn	2.78%
Italy	€0.84bn	0.28%	€4.06bn	1.27%	€12.17bn	3.57%
Total	€3.52bn	0.22%	€17.37bn	1.01%	€52.90bn	2.83%
UK* (£)	£0.44bn		£2.25bn		£6.99bn	
<i>*As a percentage of currently expected quarterly GDP</i>						
<i>*UK Sterling conversion based on real effective exchange rates April 2011</i>						

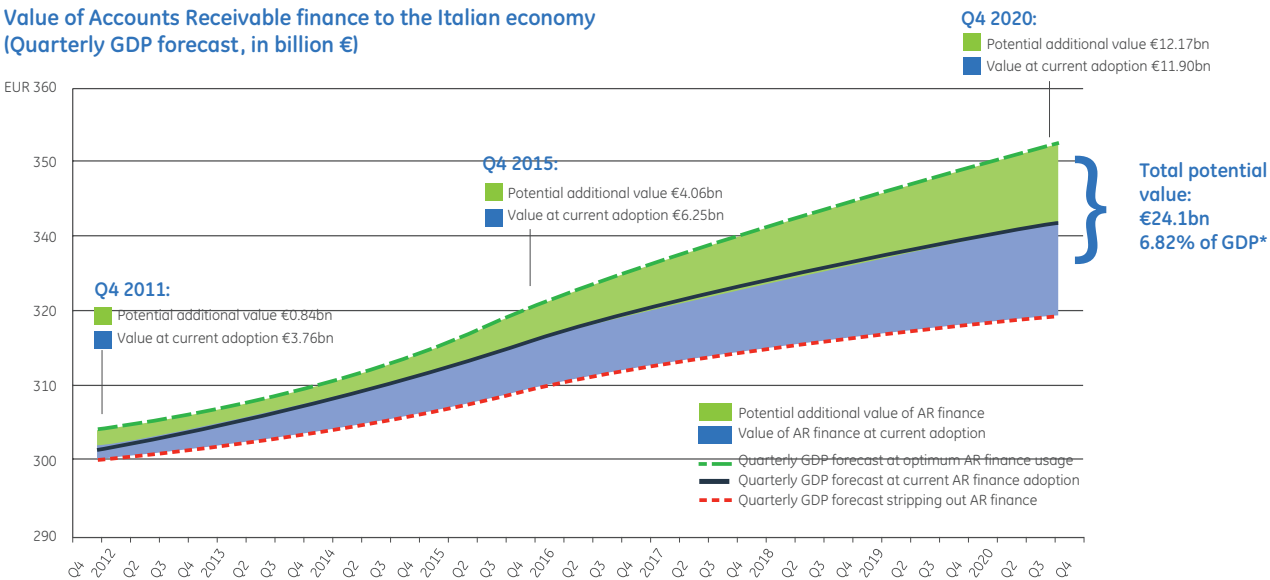
The following charts show the value of Accounts Receivable finance to the 4 European economies between Q4 2011- Q4 2020

Value of Accounts Receivable finance to the British economy
(Quarterly GDP forecast, in billion £)



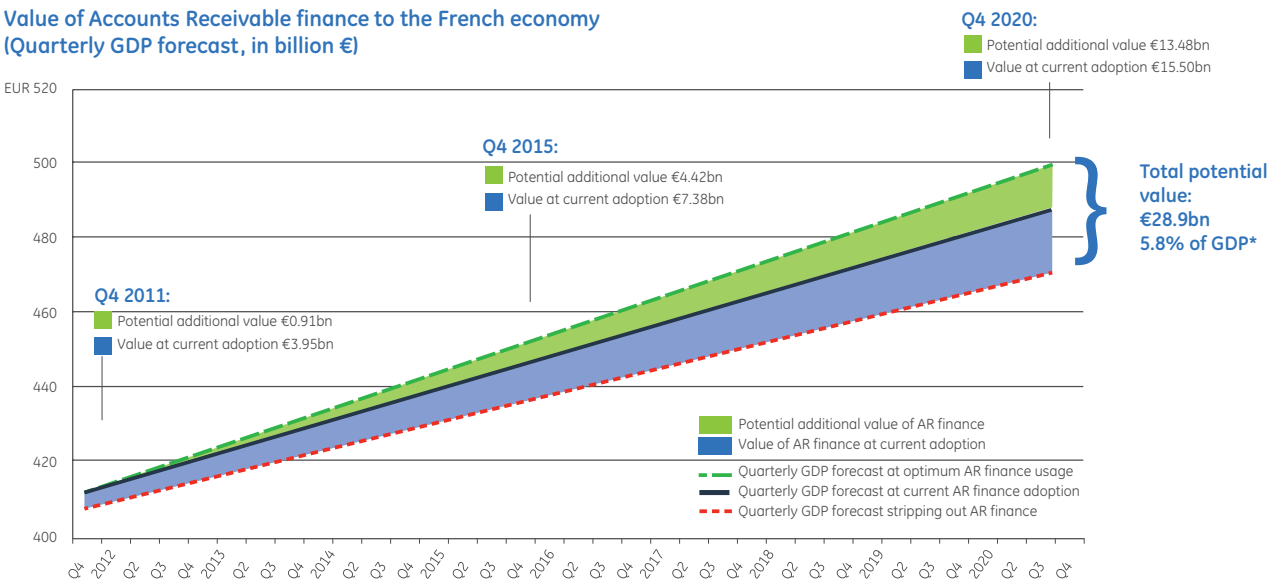
*As percentage of quarterly GDP forecast at optimum AR finance usage

Value of Accounts Receivable finance to the Italian economy
(Quarterly GDP forecast, in billion €)



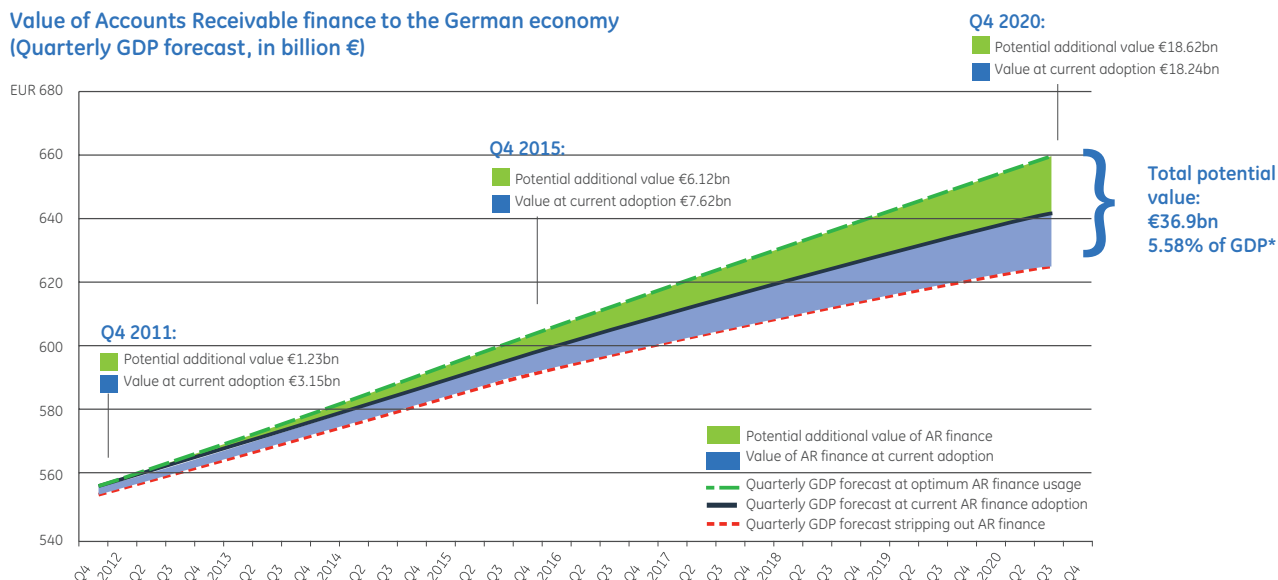
*As percentage of quarterly GDP forecast at optimum AR finance usage

Value of Accounts Receivable finance to the French economy
(Quarterly GDP forecast, in billion €)



*As percentage of quarterly GDP forecast at optimum AR finance usage

Value of Accounts Receivable finance to the German economy (Quarterly GDP forecast, in billion €)



*As percentage of quarterly GDP forecast at optimum AR finance usage

Barriers to Wider Adoption

As the headline figures from the model show, while AR finance is facilitating substantial economic output currently, the opportunity is bigger, both in terms of the number of businesses who could access this finance to deliver growth and, as a result, the overall economic impact this wider adoption could deliver.

For the purposes of this study the overall impact of wider adoption is a theoretical exercise. Nevertheless, this greater opportunity does exist, and could be realised, for both individual businesses and the wider economy if some key barriers that have been identified as part of the research can be overcome.

Lack of awareness and perceived image in particular are significant barriers that could be addressed through support and education programmes from government, business associations and providers and potentially from all three working together. These two issues were the most commonly mentioned barriers in our interviews with AR finance users.

BARRIERS TO ADOPTION

Lack of awareness. Many SMEs have a limited awareness of AR financial instruments as an alternative to bank finance or other sources of working capital finance

Image: There is a misconception that this route is primarily of use to businesses that are in difficulty

Cost: Several of the businesses interviewed for this report indicated that the cost of AR finance can be a constraint on greater levels of usage

Downward flexibility: Although the flexibility of AR finance is one of its greatest benefits, at times of shrinking order books, the scope to utilise AR finance commensurately diminishes

Sector disadvantage: Providers of AR finance attach risk premia to individual businesses and, there will be industrial sectors for whom AR finance may be unobtainable from time to time

Complexity: There is a perception that factoring was a relatively complex mechanism requiring additional investment in financial management systems

1: Introduction

Purpose of the report

- 1.1 This report highlights the current and growing importance of Accounts Receivable financing as a means by which European businesses are responding to the opportunities of the post-recession expansion phase of the economic cycle. It considers the current usage and future potential of Accounts Receivable finance in four European markets: France; Germany; Italy and the United Kingdom.
- 1.2 Accounts Receivable (AR) financing operates very differently to a bank loan or overdraft. When AR financing occurs, money is not loaned to a business; instead, the business sells a receivable (that is, a real and tangible financial asset) in order to raise capital. AR financing provides flexible alternative financing mechanisms together with customer support available to SMEs and larger organisations with a range of applications including enhanced cash flow, outsourced credit control and a flexible and responsive credit line that can grow and contract in line with the needs of the business.

Approach

- 1.3 The study's approach was to deploy five distinct but reinforcing strands of research in order to estimate the current and potential future importance of AR financing in the four European markets. The strands of analysis are explained below.
- 1.4 First, we undertook a desk based review of available documents and data from various sources, including:
 - monthly, quarterly and annual statistics on lending and support to small business for each of the four territories
 - statistics on asset based finance activity in the four territories
 - economic and finance statistics and commentary produced by the central banks and other sources
 - other data and intelligence produced by business and finance industry networks and other commentators across the four countries and pan-Europe.
- 1.5 Second, we reviewed confidential information obtained under privilege from GE capital's internal databases, including data on trends in the usage of AR finance products over the period since 2009.
- 1.6 Third, we undertook focused consultations with key finance sector stakeholders across the four countries and pan-Europe, including representatives from among the central banks in the four countries, Government departments responsible for SME growth and development and peak business organisations in each of the four countries.
- 1.7 Fourth, we undertook a series of case study interviews with over 50 companies using AR finance across the four countries. The purpose of these interviews was to explore in more detail matters such as the benefits to business associated with AR finance (as perceived by users), and the advantages/disadvantages of AR finance instruments compared to alternatives. In most cases the companies that were interviewed were current clients of

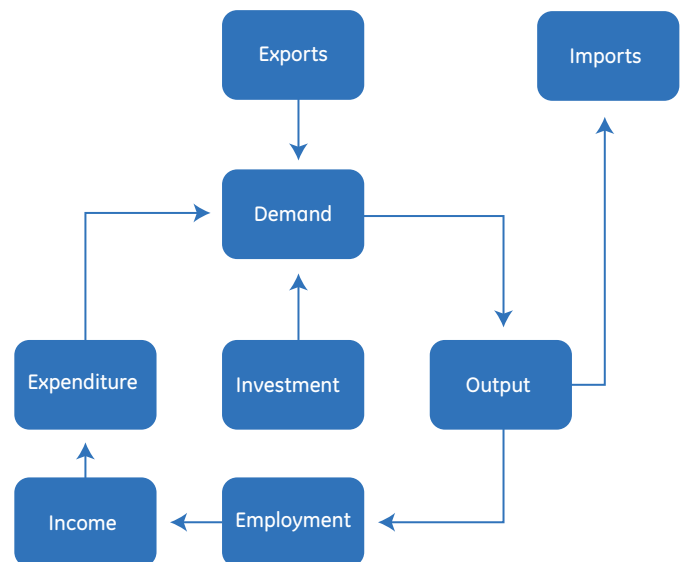
GE Capital, and the interviews were usually conducted with the Finance Directors of those businesses.

- 1.8 Fifth, and drawing from the findings and insights obtained from the first four strands of analysis, SQW⁸ deployed economic models capable of quantifying the wider economic benefits to the host economies of the current and future usage of AR finance instruments. The economic models considered a number of future scenarios over the short, medium and long-term periods for each of the four EMEA countries. The approach taken with the modelling is explained in more detail in the next sub-section.

Approach to the Modelling

- 1.9 The models that underpin the analysis are based on extensive economic, financial, businesses, labour market and demographic data for each of the four EMEA countries. One econometric model is deployed for each of the four EMEA countries that are the subject of this report.
- 1.10 The models are driven by estimated sets of equations covering consumption, investment, productivity, trade, prices, materials demand, labour market factors (labour supply and demand, skills and occupations) and underlying demographic trends. A simplified pictorial representation of the structure of the underlying econometric model is provided below:

Figure 1: Econometric Model: Schematic



Source: SQW

- 1.11 The models work by disaggregating industrial sectors, factors of production, household and government expenditures, as well as foreign trade and investment for each of the four countries. The models incorporate an input-output framework to identify the inter-relationships between industry sectors and other economic activities, which enables the simulation of dynamic interaction and feedback effects between different parts of the economy – industrial sectors, government, consumers and international trade.

⁸ SQW is a leading provider of research, analysis and advice on sustainable economic and social development for public, private and not-for-profit organisations.

1.12 The model incorporates time-series econometric relationships and cross-sectional, input-output relationships. Aggregate demand is estimated using consumption functions, investment equations and import & export equations. Dynamism is brought into the model through assumptions regarding future rates of innovation and productivity growth across the different sectors in the economy.

The Reference Case

1.13 The starting point was the development of a reference case: a central scenario for each of the four EMEA countries based on existing global and European macro-economic trends, as well as national trends and issues specific to each country.

1.14 Sectoral projections for economic output⁹ and employment under the reference case scenario are underpinned by data extending back to 2001Q1. A total of 28 industrial and commercial sectors in each country were covered by the forecasts¹⁰. The forecasts were generated on a quarterly basis from the period 2010Q1 to 2030Q4, but in this report we have focused on the period to 2020Q4, and in particular on:

- a short-term forecast (2013Q4)
- a medium-term forecast (2015Q4)
- a longer-term forecast (2020Q4).

1.15 Under the reference case, it is assumed that there is no fundamental change in terms of the demand for or supply of AR financial products in the four EMEA countries. That is, under the reference case it is assumed that financial markets continue to operate in line with recent and underlying trends. On that basis, current econometric forecasts were employed to provide estimates of the expected future underlying economic trends for the 28 sectors across each of the four countries for the period up to 2020Q4.¹¹

1.16 Then, using the reference case forecasts as a starting point, two alternative future scenarios were then developed: a “current contribution” scenario and an accelerated growth scenario. The basis of the development of each alternative scenario is explained in turn below.

Current Contribution scenario: withdrawal of AR facilities

1.17 This scenario models an alternative future where the availability of AR financial products across each of the four EMEA markets is removed, commencing in 2011. The starting point for the scenario is the creation of a hypothetical situation where AR finance becomes unavailable more or less overnight. This could be as the result, for example, of a change in legislation or an EU Directive. It is stressed that this situation is not considered at all likely: but it is a device to assess the value of the existing contribution of AR products in each of the four countries.

1.18 The logic chain that underpins the working of the scenario is as follows: withdrawn access to AR financial products will have the result for many companies of making efficient working capital financing more difficult (or inconvenient) and/or more expensive to obtain. For affected companies, this in turn will make it more

difficult and/or more expensive to effect investment projects, R&D, product innovation, new market development (including exports) and/or investment in workforce development. Over time, the net impact of constrained, less flexible and/or more expensive financing will result in reduced levels of business activity on the part of affected companies, which will have knock-on impacts on other companies in the supply chain as a result of reduced demand for materials, intermediate products and labour.

1.19 The impact of the hypotheses on the model consists of two effects:

- an immediate impact on companies that cannot find suitable, convenient and affordable alternatives to AR finance (which in turn will have secondary impacts on other companies in the supply chain)
- longer term effects on the growth potential of the economy as a whole resulting from non-availability of AR finance.

1.20 The downward adjustments to average annual sectoral growth rates for output made under the “current contribution” scenario were based on evidence gathered through the desk based research, stakeholder interviews and business user interviews conducted by SQW for this study.

1.21 The approach taken was to assess the potential susceptibility of each of the 28 sectors to both immediate withdrawal of AR finance and increased competition for alternatives.

1.22 The scale of adjustments varied from zero (non-susceptibility) to a maximum adjustment for sectors that were assessed to be most sensitive to the non-availability of flexible sources of working capital finance. The range of adjustments varied from zero to a maximum downward adjustment of 0.025% per annum to the expected future growth rate of sectors that are most susceptible to constrained availability of working capital finance. However, the scale of adjustments for the susceptible sectors were not the same across each of the four countries. This is because the evidence base gathered during the research phase of the study suggested that the extent of historic and current usage of AR financial products varied significantly for some sectors across each of the four countries.

1.23 As a result of making these various sector adjustments – based on the evidence from the research phase of the study – adjustments to the expected future growth rates of the sectors were determined and entered into the model as inputs. The econometric model then calculates second- and subsequent round effects on all sectors of the economy that result from the first round effects. For example, for sectors that are expected to suffer negative direct consequences from constrained availability of AR finance, businesses in those sectors will purchase reduced amounts of intermediate goods and other factors of production, which in turn will have negative impacts on those other businesses that supply those intermediate goods and other resources. This in turn will result in lower levels of purchases from those businesses, and thus the knock-on effects will cascade through the economy as a whole. Similar adjustments were also made for annual growth rates for employment.

⁹ Economic output is the value of the goods and services produced per time period in each country. The value of economic output is one of several ways to measure GDP, the other approaches focusing instead on expenditure and incomes respectively.

¹⁰ A full list of the sectors is appended to this report.

¹¹ The underlying econometric forecasts were produced in May 2011.

- 1.24 The downstream and knock-on impacts on other industrial and commercial sectors that result from reduced future performance in susceptible sectors were modelled using equations covering investment, productivity, trade, materials demand and labour market factors. This process resulted in estimates for total sectoral, aggregate output and sectoral, and total employment for each country and each quarter over the 2010-2020 period.
- 1.25 The overall result is the production of a final set of future forecasts for economic output that will be lower than the equivalent forecasts that are produced under the reference case. By subtracting the outcome results of the “current contribution” scenario from those of the reference case, the existing level of net economic contribution of AR financial products can be estimated.

Growth Scenario

- 1.26 The growth scenario models an alternative future where increased usage and availability of AR financial products allows businesses to exploit more fully latent growth potential. The logic chain is the opposite to that postulated under the “current contribution” scenario, that is: expanded access to and greater usage of flexible working capital finance (in the form of AR financial products) will make it easier and/or less expensive for companies to effect investment projects, R&D, product innovation, new market development (including exports) and/or investment in workforce development.
- 1.27 Over time, the net impact of more readily available, more flexible and/or less expensive working capital finance will result in increased levels of business activity on the part of benefiting companies, which in turn will have positive knock-on impacts on other companies in the supply chain as a result of increased demand for materials, intermediate goods and labour.
- 1.28 The scale of the upward adjustments in average annual growth rates for output (and employment) for sectors that were considered to be likely to respond positively to increased availability and usage of AR finance were based on evidence obtained through the stakeholder and business interviews conducted by SQW for this study. Essentially, the potential responsiveness of each of the 28 sectors to improved availability of AR finance was assessed, based on the desk-based and consultation-based evidence gathered during the research phase of the study. The scale of adjustments varied from zero (non-response) to a maximum adjustment for sectors that were assessed to be most constrained by existing levels of availability of working capital and usage of AR financial instruments.
- 1.29 The range of adjustments varied from zero to a maximum upwards adjustment of:
- 0.02% per annum to the expected future growth rate of output
 - 0.05 % per annum in expected future growth rate of employment
- for sectors that are considered to be most likely to respond positively to enhanced availability of AR financial products.
- 1.30 However, the scale of adjustments for the sectors varied across the four countries, as the evidence base gathered during the

research phase of the study suggested that the extent of current constraints and under-developed penetration of AR financial products varied significantly for certain sectors across the four countries.

- 1.31 Once the first-round adjustments had been calculated, the potential knock-on impacts on the remainder of the economy were estimated using equations covering investment, productivity, trade, materials demand and labour market factors. This process resulted in estimates for total sectoral and aggregate output, and sectoral and total employment for each country and each quarter over the 2010-2020 period.
- 1.32 The overall result is the production of a final set of future forecasts for economic output (and employment) that will be greater than the equivalent forecasts that are produced under the reference case. By subtracting the outcome results of the growth scenario from those of the reference case, the potential additional net economic contribution of greater usage of AR financial products is estimated.

Structure

- 1.33 The structure of the remainder of this report is as follows:

- Chapter 2 – provides the context for the study
- Chapter 3 – presents the first of four country-based market assessments – in this case for France – providing an overview of the research undertaken with respect to the AR market in that country, and also an assessment of the current and potential future contribution of AR finance in terms of supporting economic output and employment in that country
- Chapter 4 – provides a similar assessment for the German market
- Chapter 5 – assesses the Italian market
- Chapter 6 – considers the United Kingdom market
- Chapter 7 – presents the summary and conclusions.

2: The Growing importance of Accounts Receivables

Introduction

2.1 As has been widely reported, under the present economic climate bank-based lending is still constrained (at least, it is perceived to be constrained by many would-be business borrowers) subsequently businesses – and SMEs in particular – have had to look for new ways through which to access finance. This chapter examines the context that has led to AR instruments becoming a better known and better used form of obtaining finance.

(with interest charged and the bank holding the assets of the debtor as collateral in the event of non-payment), the use of AR differs in that money is not loaned. Instead the business sells a receivable (and therefore a real and tangible financial asset) in order to raise capital and enhance cash flow.¹³

2.6 There are several different types of AR, but the ones most commonly used are Factoring and Invoice Discounting. Each of these are discussed in greater detail below:

Factoring

2.7 Factoring is a financial transaction whereby a business sells a credit-worthy accounts receivable (usually an invoice) at a discount (generally equal to interest plus service fees), thereby receiving immediate cash.¹⁴ In addition, factoring often occurs 'without recourse', meaning the factor purchasing the receivable assumes the credit risk for the buyer's ability to pay that invoice.¹⁵ Factoring is an especially useful tool for smaller, newer high-growth potential companies who may be deemed high-risk for loan-based finance. Its key benefit is that that the underwriting is based on the risk of the receivables (i.e. the buyer's likelihood of paying) rather than the risk of the seller. The seller in turn benefits from improved cash flow, outsourced credit control, and from having a flexible financial solution that is linked to business performance and future growth.¹⁶

Invoice discounting

2.8 Often treated in literature as a type of factoring, invoice discounting is another common form of AR financing. Under factoring, it is the responsibility of the factor to secure payment from the customer (with the customer being aware that payments have to be made to a third party and not to the seller). By contrast, with invoice discounting, agreements are managed on a confidential basis with the customer being unaware that a third party will be controlling the invoice. Payment is instead made to a trust account under the control of the factor. Owing to the confidential nature of the service, it is the responsibility of the seller (i.e. the factors' client) to obtain customer payment (unlike factoring where this responsibility falls onto the factor). Invoice discounting is therefore more concerned about providing access to finance whereas factoring is more about access to finance with additional professional services. Invoice discounting therefore tends to be utilised by larger organisations that are more likely to have the resources to run their own professional credit function.¹⁷

The Financing Gap

2.2 Even before the global recession of the late 2000s, commentators frequently talked of a financing gap for SMEs in Europe. For example, a 2006 OECD report identified that there were significant numbers of SMEs that could use funds productively if they were available, but could not obtain finance from the formal financial system.¹² The factors that contribute to the financing gap for SMEs include a lack of appropriate financing mechanisms, regulatory rigidities, or gaps in the legal framework. This puts SMEs at a disadvantage relative to more established firms when competing for credit from banks and financial institutions.

2.3 These inherent disadvantages faced by SMEs were exacerbated further by the credit crunch of 2008-09 where the worsening financial situation of major global banks and other lending institutions meant that lenders were less inclined to provide business loans. As a result, alternative forms of obtaining finance, such as AR financing, have been increasingly sought by SMEs across different EMEA countries.

2.4 The importance of the financing gap was confirmed by many of the stakeholders and businesses we interviewed for this study. One stakeholder put it in the following terms:

'The banks continue to be rather restrictive. While it is normal for smaller businesses to get finance from a range of sources – including, for some, factoring – and most larger have a range of options including equity finance, there is a middle range of businesses – say from 100M€ turnover to 200M€ - where there is a real shortage of funding in the market. Moreover, this situation may worsen with the advent of Basle III'.

Accounts Receivable Finance Introduced

2.5 Accounts Receivable (AR) financing is where a receivable (typically an invoice) forms the basis for a credit transaction. Whereas under a typical bank loan, a financial institution will offer a loan to a business based on their credit worthiness

¹² OECS [2006]. The SME financing GAP (Vol. II): Theory and Evidence, OECD, p.9.

¹³ Unlike a bank loan, three parties are involved in an AR transaction: the factor (the organisation buying the receivable), the customer (the organisation paying the invoice), and the debtor.

¹⁴ Klapper, L. [2006] Export Financing for SMEs: The Role of Factoring, 15 September, The World Bank Group

¹⁵ Ibid.

¹⁶ Asset Based Finance Association (ABFA) [2009] A guide to Asset Based Finance.

¹⁷ Greater London Enterprise Ltd. [2003] Analysis of Use of Factoring: DG Enterprise- Access to Finance Unit, pp. 18-22. Available from: http://ec.europa.eu/enterprise/search/index_en.htm?q=asset+based+finance

Advantages of Accounts Receivables

2.9 Accounts receivable financing offers a number of distinct advantages to businesses, especially for those who have difficulty in accessing traditional bank loans¹⁸:

- **provision of very short term funding** – factoring allows for very short term financing without businesses having to provide supplementary guarantees. Factors usually provide funds on the day the invoice is handled
- **improvement of cash-flow** – the period for obtaining cash through AR financing is shorter than through credit
- **flexibility over use of finance** – factoring allows for funds to be used to meet whatever the immediate needs of the business are
- **an easier application process** – the number of documents required during the AR financing process is usually considerably less than for regular bank credit.
- **protection against non-payment of invoices** – a particular benefit of factoring alone is that the risk of non-payment is entirely transferred to the factor, leaving the debtor free to concentrate efforts on sales and production.

2.10 Aside from these more general benefits, the use of Accounts Receivable financing is especially advantageous to SMEs with a predominantly export based focus. The agreement of suitable factoring terms can help exporters mitigate against fluctuations in exchange rates.¹⁹

Evidence of the growing use of AR financing

2.11 SMEs have traditionally relied on bank lending in order to secure finance for cash flow and to fund growth. However, banks have been increasingly reluctant to loan to businesses; for example, a recent Bank of England survey found that the stock of lending by all UK resident banks and building societies to businesses contracted by around £5 billion in the three months to November 2010.²⁰ The described advantages offered through the use of accounts receivable financing has therefore made them more attractive to businesses.

2.12 A similar picture has emerged in other European markets, with SMEs again increasingly turning to more AR orientated financing methods. The European Central Bank conducted a series of surveys on the access to finance of SMEs. It found that between the first financial half of 2009 and the second financial half of 2010, the proportion of respondents stating that they had accessed external financing over the preceding six months through 'leasing, hire-purchase and factoring' had increased from 27 per cent to 35 per cent.²¹

2.13 Although AR financing has become increasingly popular, in general it has not been a widely used form of financing compared to instruments. A recent survey suggested that only 19 per cent of European SMEs were using AR financing such as factoring, considerably lower than the 51 per cent for leasing/

renting and 50 per cent for overdrafts.²² One of the stakeholder interviewees put it in the following terms:

The majority of SMEs have taken the experience of the recession to think more long term about the nature of their financing models and to develop a more holistic strategy. The use of other financial instruments – such as leasing and factoring – is increasing, but only a small minority of SMEs use these instruments and they are not normally part of the long term financial model.

Barriers to the Use of Accounts Receivable Finance

2.14 The economic recovery is creating a need for working capital and therefore an increase in latent demand for finance. However, only a small part of the increased latent demand for finance translates into actual requests for new funds, particularly among smaller SMEs who may be less well placed in succeeding in applications for traditional bank overdrafts or loans due to either poor cash flow, a lack of security and market imperfections. An additional factor is discouraged demand – the (possibly erroneous) perception that lenders are simply not lending, leading to investment plans being put on hold and/or non-bank sources of finance being used instead.

2.15 Evidence from this study suggests that the main barriers to greater usage and take-up of AR finance include the following aspects:

- **Lack of awareness.** It is still the case that many SMEs have a limited awareness of AR financial instruments as an alternative to bank finance or other sources of working capital finance. Many of the firms we interviewed as part of this study had only started using AR finance comparatively recently, and many told us that previously they had simply not been aware of the opportunities available through AR finance. One of the businesses we interviewed told us:

We started with factoring 4-5 years ago. Many other businesses our size do not seem to be aware of this mechanism. We started when we hired a new finance executive who knew of factoring from his last position. Before that we didn't know about it. It works perfectly for us because it is so flexible.

- **Image:** Among many non-users who are aware of AR instruments, there is a lingering perception that this route is primarily of use to businesses that are in difficulties. Several of the businesses we interviewed who were recent converts to using AR finance told us that one of the reasons they hadn't got involved with AR finance until recently was a perception that AR was suited to businesses in trouble, or close to bankruptcy. The businesses that told us this also said that once they had started using AR instruments they had become strongly convinced of the benefits, and that their previously held views were misconceived. Another business we interviewed told us:

We are aware that factoring is sometimes not so well regarded, and some companies think it is only for businesses that are in trouble, which is not the case but factoring has this image.

¹⁸ Vasilescu, L. G. [2010] 'Factoring - financing alternatives for SMEs'

¹⁹ Klapper, L. [2006] Export Financing for SMEs

²⁰ Bank of England [2011], Trends in Lending: January 2011, London, p. 4

²¹ European Central Bank, [2011] Survey on the Access to Finance of SMEs in the Euro Area: September 2010 to February 2011, p.3. The published data does not isolate factoring and simply considers it along side leasing and hire-purchase.

²² Taken from OECD, The SME Financing Gap (Vol. II), p. 54

2.16 Apart from lack of awareness and a sometimes poor image, a minority of interviewees also reported a number of other potential barriers to the greater usage of AR finance

- **Cost:** Several of the businesses interviewed for this report indicated that the cost of AR finance can be a constraint on greater levels of usage. While this was by no means a majority response, it has to be acknowledged that for some potential users the cost of AR finance cost may be a barrier to initial or expanded usage.
- **Downward flexibility:** Although the flexibility of AR finance is one of its greatest benefits, several users mentioned that there is a potential downside: that at times of shrinking order books, the scope to utilise AR finance commensurately diminishes. It is therefore possible that the risk of a shrinking facility may be a deterrent to current non-users of AR finance.
- **Sector disadvantage:** Providers of AR finance attach risk premia to individual businesses and, in some cases, there will be industrial sectors for whom AR finance may be unobtainable from time to time.

- **Complexity:** one of the stakeholders interviewed suggested that there was a perception that factoring was a relatively complex mechanism requiring additional investment in financial management systems. However, this response was contradicted by companies using factoring, who told us that they found it straightforward, easy to use and very flexible. It may be, however, that there is a perception of complexity around factoring among non-users that is preventing more businesses from utilising this opportunity.

2.17 In terms of the 'growth scenario' model introduced in the previous section, the opportunity for increased usage of AR products focuses on the first two barriers in the list above: that is, (a) opportunities to increase the awareness of AR and (b) to address lingering negative perceptions of AR that are likely to persist among significant numbers of businesses that otherwise could be accessing and benefiting from AR.

2.18 Having introduced AR finance, the next four chapters of the report consider, in turn, how AR finance operates across four European countries, starting with France.

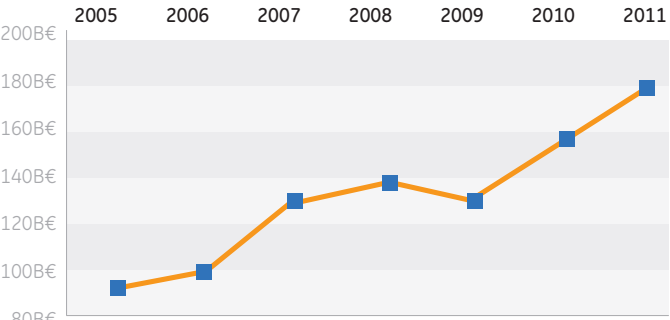


3: Accounts Receivables: France

Context

- 3.1 Business conditions in France have improved following the recent recession. As a consequence, companies require adequate and enhanced access to working capital in order to respond to opportunities and grow. Furthermore, supply-side constraints on credit are starting to ease for all types of finance.
- 3.2 Businesses that use AR products are enthusiastic and clear on the business benefits, but only a small proportion of businesses that could benefit from AR finance currently do so, mainly because of a lack of knowledge. This coupled with the benefits that some users obtain from AR – particularly in sectors such as manufacturing – means that expanded provision has the potential to deliver significant levels of financial and economic benefits.
- 3.3 Factoring is increasingly regarded in France as an attractive solution for managing companies’ trade receivables, while providing them with financing complementing (or in part replacing) conventional bank facilities. Many French SMEs increasingly recognise that factoring offers a source of liquidity to meet the evolving needs of their companies.
- 3.4 Companies using factoring gain competitive advantages such as the conversion of fixed costs into variable costs. Also, factoring may widen the sources of short-term finance beyond traditional products. Such companies then have the possibility of maintaining their discount lines with their banking partners, who would readily accept the prime paper issued by the factoring process. As a result, in France, trade receivables represent on average 40% of a company’s assets.
- 3.5 The chart below shows recent trends in the overall volume of the factoring market in France. The data indicates that the 2008-09 recession was only a temporary setback to growth in usage of AR finance, which is now growing again strongly.

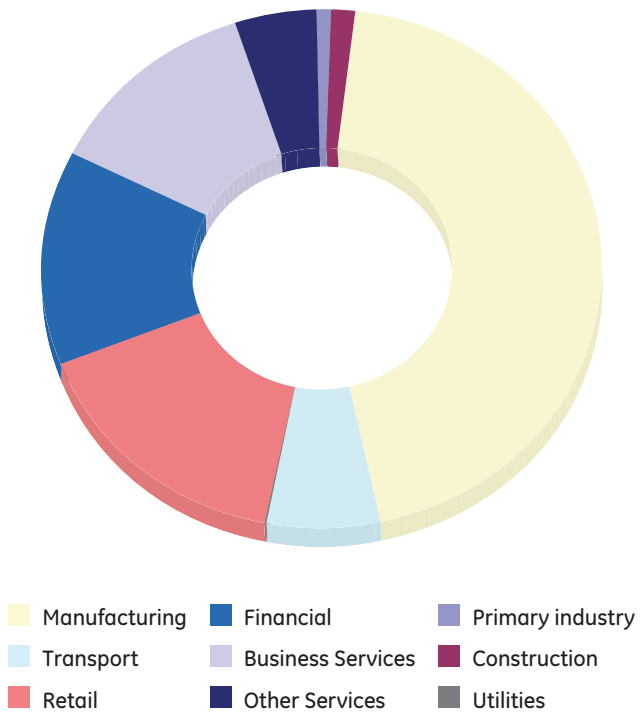
Figure 3-1: Recent trends in the volume of factoring in France, € billions



Source: SQW, from various sources

- 3.6 GE Capital supplied data showing recent trends in their AR finance business in France for a range of instruments. The figure below shows the breakdown by business sector of provision during December 2010:

Figure 3-2: Sectoral distribution of GE Capital Factoring in France



Source: GE Capital, interpreted by SQW

- 3.7 It can be seen from this chart that the orientation of the businesses in France (by value) is towards Manufacturing (44.5%), with Retail & distribution (17.8%), Financial services (15.3%) and Business services (13.2%) also providing important sources of customers. The GE Capital data also shows increasingly strong growth in demand, especially since the September 2010 quarter

Stakeholder interviews

- 3.8 Stakeholder interviews²³ were undertaken as part of this study, which were designed to elicit responses on a range of issues regarding recent and expected future trends on the demand for and availability of working capital for business, including AR finance and other (competing and/or complementary) products and instruments. The questions also focused on the potential impacts on business growth and performance of the level of availability of AR financing, and costs associated with it.

²³ Details of all stakeholder organisations interviewed for this study are provided in an appendix to this report.

3.9 The key points raised in the interviews are summarised as follows:

- **Demand for working capital:** there was consensus that the demand for working capital is now strong, following a fall during 2009. There is also evidence that in some cases demand remains unsatisfied. There was a particular concern that the competitive position of SMEs in France had deteriorated compared to the situation among key competitors. The key driver for increase in demand is the rebound of markets during the post-recession recovery.
- **Availability of working capital:** there was a consensus that the banks have adopted a much more conservative and selective approach to lending to business, with smaller loans seen as unattractive. One interviewee cited in-house research that found that 23% of businesses are considering reducing their borrowing requests due to the difficulties and costs of obtaining bank finance. One of the consultees remarked that while AR finance for some users had also been more constrained during the downturn, there remained a broad consensus that the available AR finance had not declined to the same extent as bank finance.
- **Impacts on business and sectors:** a number of consultees made the point that with more restrictive funding, SMEs are much more restricted in their ability to develop their businesses. Sectors that were cited as being particularly affected by constrained lending included Construction and Automotive.
- **Trends in finance costs, and impacts of these on business and sectors:** financing costs (across all forms of credit) have been on an upward trend in France since September 2010. Invoice discounting was seen as competitive with bank loans, but factoring was perceived as sometimes being more expensive. Increased costs of finance, coupled with constrained availability (especially for bank loans) was perceived as having a potentially dampening effect on business activity and (in particular) on business investment. The sectors that are most affected appear to be Automotives and Aerospace.
- **Expected future trends:** There was a reasonably broad consensus that credit market conditions could harden, with further restrictions on lending and consequential impacts on business activity and investment. A key potential driver, mentioned by several consultees, was tightening restrictions under 'Basel III', which was perceived as being likely to lead to more costly and restricted credit.²⁴
- **Other comments.** Factoring in France is generally offered to businesses with a turnover greater than €100,000. Some sectors are generally excluded, such as construction companies, financial institutions and B2C firms. While 30,000 companies currently benefit from Factoring in France, the factoring association there estimates that the potential number of companies for whom factoring could deliver benefits is over 100,000.

Company interviews

3.10 A total of 16 businesses in France were interviewed for this study.²⁵

All of these businesses are users of AR financial instruments, and all are current clients of GE capital. The interviews were conducted with senior managers at the businesses, usually the Finance Director or other senior finance team executives, and in some cases with the CEO. A brief summary of the responses are provided below.

- **Business environment:** all of the businesses reported improved business performance over the past 12-18 months. The main drivers identified ranged from a general improvement in the business environment to more specific factors including keener pricing and improved service or product quality.
- **Cash flow position and financing.** The majority of interviewees expressed concern or caution regarding their cash flow. About one-third of the businesses reported having experienced difficulties in obtaining bank credit over the previous year. As one of the interviewees put it:

During more difficult trading conditions many SMEs suffer restrictions on their funding. Thus, market opportunities may be missed and we may be exposed to cash flow problems that can put us at risk of failure.

- **Use and availability of finance:** All of the interviewees volunteered that Accounts Receivable finance had been especially helpful in helping their business respond to the challenges of the immediate post-recession situation and the subsequent recovery phase. Around half of the companies indicated that bank loans and/or overdrafts were also important to their businesses. There was a wide variety of responses with respect to trends in the cost of finance over the past 12 months or so. Half reported that the cost of finance had been increasing (in some cases significantly).
- **Impact on business:** About three-quarters of the businesses reported that finance market conditions had had adverse impacts on their business activities, the most common being delayed or reduced capital investment. These responses were not particularly concentrated among the manufacturing businesses and included service sector and retail/wholesale firms. As one interviewee put it.

The cost of credit had a real impact on business investment during 2008-2010. As a result we reduced our programme of investment and restricted some of our business activities. The decline in availability of credit and the increase in its cost thus had a direct and adverse impact on our business.

- **Use and impact of AR finance products:** All of the interviewees used factoring, and about half also used invoice discounting. The only 'downside' to the use of AR that any of the businesses mentioned was the cost. All except two of the businesses interviewed said that they planned or hoped to maintain or increase their use of AR financial products over the next 12 months. The main business benefits cited were:

²⁴ Basel III is global regulatory standard on bank capital adequacy and liquidity agreed by the members of the Basel Committee on Banking Supervision.

²⁵ The 16 businesses averaged 135 employees and ranged from a minimum of 6 to a maximum of 700. Annual turnover ranged from around 1 M€ to 90M€, averaging just under 30 M€, and the businesses were widely spread

- ⇒ enhanced financial resilience: including the ability to deal with peaks and troughs (including seasonal fluctuations in demand) and in helping to facilitate a more regular cash flow.
- ⇒ financing business growth and development: a number of businesses mentioned that they have used AR products for around 10 years, and that this usage was directly linked to the growth of their business over that period.

3.11 The users of AR finance interviewed for this study in France were, overall, very positive about their experiences:

- (1) *Over this past year or more, using factoring really helped facilitate the development of our business activities. It was especially useful in helping to deal with financial deadlines and to meet our commitments to suppliers and other creditors. This was vital because while cash flow was tight, payments from our customers was more and more delayed.*
- (2) *Factoring is ideal for our needs, especially because the market for our products is highly seasonal. Factoring enables us to smooth out the peaks and troughs of our natural cash flow cycle.*
- (3) *Factoring facilitates a regular cash flow and avoids problems caused by delays in customer payments. We have been using this method for nearly ten years and it is quite essential for our business.*
- (4) *The beauty of factoring is the flexibility that it provides the business, especially in times for expansion. Using factoring we can quickly and effectively respond to increased demand for our products by purchasing new stock and equipment.*

Current and potential future importance of AR Finance

Reference Case

3.12 Based on the findings of the data research along with stakeholder and company interviews, we are able to estimate the current contribution of AR finance to the French economy. The starting point is in the establishment of the reference case. The first table below sets out the expected future levels of overall economic output across all business sectors, measured in B€ (using 2005 prices). The results are also presented as an index, where 2007Q4 = 100.0. The table also presents expected future levels of aggregate employment (measured in thousands). All data in the table are based on econometric forecasts dated April 2011. Under this reference case, the French economy is predicted to grow to 486 billion Euro (2005 prices) by the fourth quarter of 2020, i.e. growth of around 19% compared to the level of 2007Q4. Aggregate employment over the same period is expected to grow by 3.3%, to 24.3 million.

Table 3-1: Reference Case: Economic Output and Employment, France, 2007-2020

Indicator	2007Q4	2015Q4	2020Q4	2015Q4	20020Q4
Output B€	408.3	403.7	428.5	445.5	485.8
Output Index	100.0	98.9	104.9	109.1	119.0
Jobs ('000s)	23,555	23,277	23,606	23,874	24,325
Jobs Index	100.0	98.8	100.2	101.4	103.3

Source: SQW, based on Oxford Economics forecasts

Current Contribution scenario

3.13 The next step is to consider the current and expected future contribution of existing levels of usage of AR financial products in France over the period to 2020. This assessment of what benefits are expected from current levels of provision is termed the "current contribution" scenario. The assessment has been done by estimating the potential impact of a hypothetical withdrawal of AR finance from the French economy, starting in 2011.

3.14 The French economy is expected to grow by around 19% over the 2007-2020 period under the reference case, but without the support of AR financing, this potential growth would be significantly constrained. We estimate that the economic output supported by AR financing will be worth around 15.5B€ over 2007 to 2020, which is about 20% of the total growth expected over this period.

3.15 Moreover, the immediate impact of a loss of AR finance to the French economy would be especially significant. We estimate that the impact of a sudden withdrawal of AR facilities would reduce the size of the French economy by around 3.9B€ per quarter in 2011Q4. Of course, this scenario is not considered at all likely, but it serves to underline the value of the current contribution of AR finance to the French economy.

3.16 A similar picture emerges for employment. Under the reference case, the French economy is expected to add around 770,000 jobs over the 2007-2020 period, but a significant proportion of these jobs would be lost if AR financing wasn't available. We estimate that there would be around 331,000 fewer jobs in France by 2020 (compared to 2007) if AR instruments were unavailable to French companies from 2011 onwards. The results for economic output and jobs are set out below.

Table 3-2: Current Contribution: Economic Output and Employment, France, 2007-2020

Indicator	2007Q4	2015Q4	2020Q4	2015Q4	20020Q4
Output B€	408.3	403.7	423.1	438.2	470.3
Output Index	100.0	98.9	103.6	107.3	115.2
Jobs ('000s)	23,555	23,277	23,466	23,693	23,994
Jobs Index	100.0	98.8	99.6	100.6	101.9

Source: SQW

3.17 Moreover, we estimate that the immediate impact of a loss of AR finance would be the more or less immediate direct and indirect loss of around 112,000 jobs to the French economy. In other words, AR finance is estimated to be currently underpinning nearly 112,000 jobs in France in 2011Q4.

3.18 The table below summarises the difference between the current contribution scenario and the reference case for France, focusing on the differences in the indexed results of the two scenarios.

Table 3-3: Current contribution scenario: Compared to Reference Case, France, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.00	-1.31	-1.81	-3.80
ΔJob Index	0.00	0.00	-0.60	-0.77	-1.41

Source: SQW

3.19 As well as the situation regarding the overall economy, we have examined the situation under the current contribution scenario with specific reference to manufacturing, given the particular importance of AR financing to manufacturing businesses in France.

Table 3-4: Current contribution scenario – impact on manufacturing, France, 2007-2020

Indicator	2013Q4	2015Q4	2020Q4
Output (overall) B€	-5.3	-7.4	-15.5
Jobs (overall, '000s)	-140.6	-181.1	-331.0
Output (manufacturing) B€	-1.2	-1.8	-4.1
Jobs (manufacturing, '000s)	-39.3	-55.2	-112.0

Source: SQW

3.20 Thus, of the 15.5 B€ of expected growth in quarterly economic output (by 2020) that is dependent on the availability of AR financing, about 4.1 B€ (26.5%) is located in the manufacturing sector. Similarly, of the 331,000 additional jobs that are dependent on AR financing, 112,000 are found in the manufacturing sector.

Growth scenario

3.21 So far we have considered a hypothetical future where AR financing is unavailable. This is to aid an assessment of what the underlying contribution of AR financing could be in terms of expected future growth in jobs and output. The next task is to develop an alternative future scenario that examines what the future might look like if more companies were aware of and were able to take advantage of the business benefits that AR financing provides.

3.22 Whereas only around 30,000 companies currently benefit from Factoring process in France, it is estimated that the potential number of companies for whom factoring could deliver benefits is over 100,000 (as was pointed out by a number of stakeholder and company interviewees). However, factoring is not suitable for all sectors of the economy, nor is it the case that factoring is equally appropriate for all companies within any particular sector. The results for economic output and jobs in this growth scenario are set out below.

Table 3-5: Growth Potential Scenario: Economic Output and Employment, France, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
Output B€	408.3	404.2	430.8	450.0	499.2
Output Index	100.0	99.00	105.5	110.2	122.3
Jobs ('000s)	23,555	23,278	23,630	23,926	24,495
Jobs Index	100.0	98.8	100.3	101.6	104.0

Source: SQW

3.23 The table below summarises the difference between the growth potential scenario and the reference case, focusing on the differences in the indexed results of the two scenarios.

Table 3-6: Growth Potential scenario: Compared to Reference Case, France, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.11	0.56	1.08	3.30
ΔJob Index	0.00	0.01	0.10	0.22	0.72

Source: SQW

3.24 The French economy is expected to grow by around 19% over the 2007-2020 period, but we estimate that if the potential of AR financing was exploited in full then the extent of overall growth could be considerably greater. We estimate this additional growth potential to be around an extra 13.5 B€ in quarterly economic output, which would be an additional uplift of 2.7% in economic output over the 2020Q4 level expected under the reference case. This uplift in economic output performance is equivalent to an additional 0.21% per year in average annual growth rate over the 2007-2020 period.

3.25 For employment, under the reference case, the French economy is expected to add around 770,000 jobs over the 2007-2020, but with AR financing used to its full potential we estimate that there could be an additional 170,000 jobs in France by 2020 compared to reference case.

3.26 We have also examined the situation under the full potential scenario for manufacturing, as AR financing is particularly important for manufacturing businesses in France.

Table 3-7: Full Potential scenario – impacts on manufacturing, France, 2007-2020

Indicator	2013Q4	2015Q4	2020Q4
Output (overall) B€	2.3	4.4	13.5
Output (manufacturing) B€	0.8	1.5	4.7
Jobs (overall, '000s)	23.5	51.9	170.4
Jobs (manufacturing, '000s)	13.8	30.1	95.6

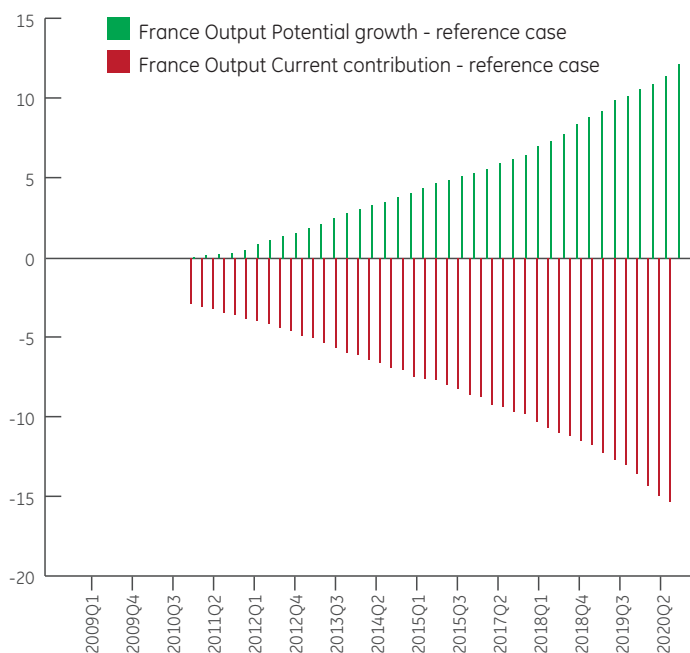
Source: SQW

3.27 Thus, of the 13.5 B€ of additional quarterly economic output that could be available by 2020Q4 if AR financing was used by French businesses to its full potential, 4.7 B€ (35%) is located in the manufacturing sector. Similarly, of the 170,000 additional jobs that stand to be delivered if AR financing was used to its full potential, 96,000 are found in the manufacturing sector.

Summary of Potential Combined Impacts

3.28 The combined impact of the current contribution and accelerated growth scenarios can be considered as the total potential added value of AR finance to the French economy. The chart below shows this incremental additional value – in terms of economic output – over the 2011-2020 period. The total value that stands to be generated by 2020 is around 29B€ per quarter, consisting of 15.5B€ of underlying “current contribution” value and 13.5B€ of new additional growth potential.

Figure 3-3: Combined impact of the Growth and Underlying Contributions: Output (B€)

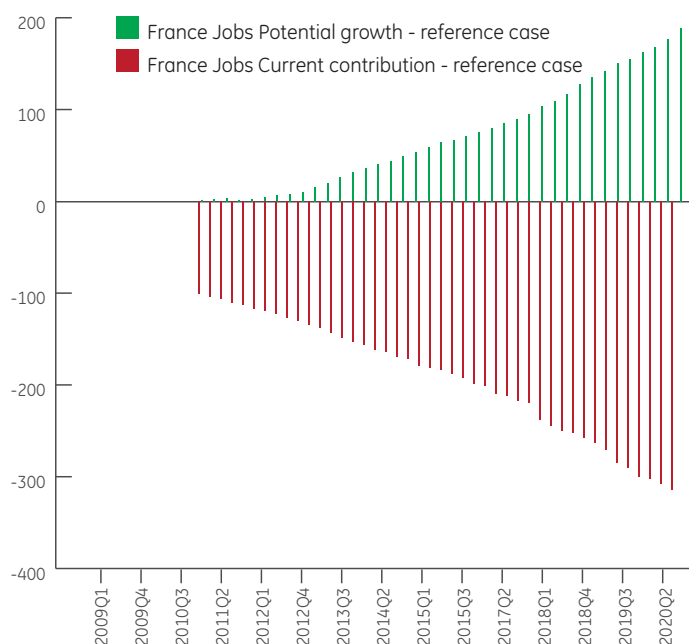


Source: SQW

3.29 The next chart shows the same effect, but this time for employment. The chart shows that, by 2020, around 501,000

additional jobs stand to be gained, consisting of around 331,000 jobs supported under the “current” (i.e. underlying) contribution and 170,000 new jobs that stand to be gained through accelerated growth potential.

Figure 3-4: Combined impact of the Growth and Underlying Contributions: Jobs ('000s)



Source: SQW

3.30 The chart shows that, by 2020, around 501,000 additional jobs stand to be gained, consisting of around 331,000 jobs supported under the “current” (i.e. underlying) contribution and 170,000 new jobs that stand that could be gained through accelerated growth potential.

Case Study: Factoring – Adecom

Adecom is a company specialising in external and internal signage (adhesive letters, digital printing, cutting and finishing). It provides large format digital printing of visuals for large signs. Based in the Paris region, Adecom was set up in 1998 and employs five people. Since its creation, Adecom has recorded sales of €800,000 to €1.2m.

After experiencing financing difficulties in 2002, Adecom’s joint-managing director Paul Alves turned to the company’s bank for a solution under the Dailly Law. Some years later, this banking institution ceased to provide this method of financing and wanted to reposition itself as a provider to larger companies. This prompted Paul Alves to seek a new financial partner.

For a very small company like Adecom, some clients take between 120 and 160 days to settle their bills. Hence reducing collection periods is crucial. This is why Adecom turned to GE Capital FactoFrance in 2010 to implement a classic factoring solution for almost all its customer accounts (€50,000-60,000 a month).

For Adecom, there are a number of advantages to using factoring finance. Mr Alves highlighted the daily responsiveness of the team at GE Capital FactoFrance: “When I send an invoice in the afternoon, my contact at GE Capital FactoFrance speeds up the verification process to ensure I obtain finance the next day. Before, under the Dailly system, I sometimes had to wait four to five days.” He also explains that using factoring has helped the company to maintain its financial equilibrium, notably by offsetting the collection periods resulting from the French Law for the Modernisation of the Economy (LME).

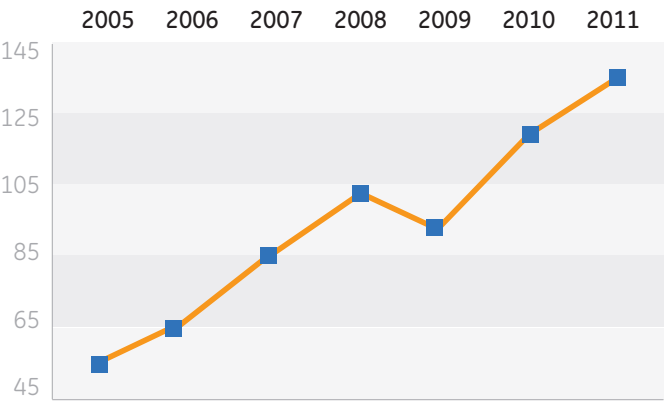
Finally, financing through accounts receivables has, in particular, enabled the company to create a new position within the firm and to finance one-off investments such as the purchase of hardware essential to the company’s business like a professional sewing machine costing around €5,000, and in the future a machine for welding tarpaulins.

4: Germany

Context

- 4.1 The economic crisis has impacted on the financing situation of German business. Reductions in profit and deteriorating payment terms and conditions have led to increased financing pressures, lower equity ratios and increased need for external finance. At the same time, financial institutions, affected by defaults on repayments during the recession, have become more stringent in their requirements, all of which has put pressure on costs and availability of finance.
- 4.2 The attractiveness of alternative financing instruments has increased. Following a decline during 2009, the factoring market rebounded very strongly in Germany during 2010, particularly during the second half. Moreover, the number of businesses using factoring also increased by about the same proportion, to around 12,000. As a result of the strong growth, the leading factoring association estimates that around 5.3% of total German GDP is now financed by factoring²⁶.
- 4.3 The chart below shows trends in the overall volume of the factoring market in Germany since 2005. The data indicate that the recent recession was a significant setback to the usage of AR finance in Germany, but that effective demand is now growing again strongly.

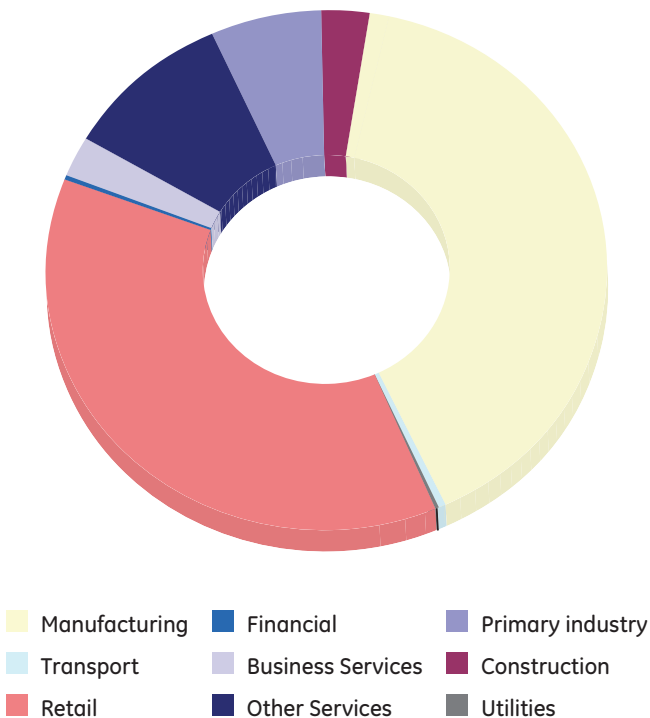
Figure 4-1: Recent trends in the volume of factoring in Germany, € billions



Source: SQW, from various sources

- 4.4 GE Capital supplied data showing recent trends in their AR finance business in Germany for a range of instruments. The sectoral breakdown of provision for December 2010 is set out below. It can be seen from the data in the table above that the orientation of the AR business in Germany is primarily focused towards two sectors; Manufacturing (44.5%) and Retail & Distribution (40.9%). The only other sector of particular significance is ‘other services’, which is a catch-all for sub-sectors such as professional services including legal services and engineering consultancy.

Figure 4-2: Sectoral distribution of GE Capital Factoring in Germany



Source: SQW, from GE Capital data

Stakeholder interviews

- 4.5 As for France, the German stakeholder interviews were designed to elicit responses on a range of issues regarding recent and expected future trends on the demand for and availability of working capital for business, including AR finance and other (competing and/or complementary) products and instruments. The questions also focused on the potential impacts on business growth and performance of the availability (or otherwise) and cost of this finance.
- 4.6 A brief summary of the responses to the key themes of the topic guide are provided below.
- Demand for working capital:** Demand for working capital increased during the recession because it took companies a longer to convert production into revenue. Since the second half of 2010 it is noticeable that accelerating growth is leading to increasing requirement for investment and working capital. Working capital credits for SMEs are being increasingly provided again by banks and through new support measures. During the crisis, companies reverted to mobilising internal reserves and alternative financing mechanisms became more popular. The number of companies using factoring – and the total volume of factoring – increased. It is also evident that demand for factoring among these companies has been maintained in the recovery phase, as per the 2010 data from DFV and GE Capital.

- **Impacts on business and sectors:** During the recession many SMEs had to re-negotiate their credit contracts. Poor financial standing implies disadvantageous terms and higher levels of collateral. This always means that there is a risk that growth opportunities can't be converted. Because many smaller SMEs are often privately owned, they tend to postpone expansion rather than becoming dependent on financing sources and lose independence. However, businesses particularly dependent on the general state of the economy, exporters as well as young companies, have particular problems with accessing working capital financing. Recession and decline in export demand in key countries increase the risk for sales and payments. Sectors that suffered particularly included Construction and Investment goods.
 - **Trends in finance costs, and impacts of these on business and sectors:** In terms of costs, refinancing costs compared to 2009 have fallen, credit standings have not been increased and competition has reduced margins. This meant that the costs of working capital have actually fallen for many users. However, in some cases the cost of financing has increased strongly because of used liquidity reserves and increasing demand for external finance.
 - **Expected future trends:** in the short-term, access to working capital was not seen as a problem, at least for companies in good standing. Long-term, there maybe shortages. Basel III may make financing more difficult, although it is currently difficult to predict with certainty what the cumulative effect will be from higher equity proportions, higher refinancing costs, higher bank contributions, etc. An holistic financing approach including the use of other financing instruments will become ever more important; meaning that in addition to equity finance, factoring and leasing might become much more important.
 - **Other comments:** It was pointed out that most SMEs have reacted very flexibly to the changing financing environment. They have raised equity even in difficult circumstances and understood the financing needs of their businesses in a holistic way. This flexibility will help them in future to address survival and growth. SMEs with ambitious expansion plans should actively consider other mechanisms – including factoring – as credit rating will be very important to get bank credits.
- Companies in sectors such as automotives and machinery reported a particularly strong re-bounce. The picture among the more domestically-focused companies was more mixed, with some reporting buoyant conditions but others reporting that demand from consumers is still subdued.
- **Cash flow position and financing.** Compared to France there were more businesses expressing the view that their cash flow position was neutral or better. In terms of obtaining finance over the past 12 months, the majority of businesses reported having experienced no difficulties, but with a significant minority reporting difficulties or constraints.
 - **Use and availability of finance:** All of the interviewees were positive to very positive regarding the experience with Accounts Receivable finance. A number identified that AR had been pivotal in helping them survive the challenges of the 2008-2009 recession and in helping to respond positively to the post-recession opportunities. In at least two cases AR finance was part of a financial restructuring package that a consortia of lenders had put together to enable a basically sound business to survive the shrinkage of markets during the depth of the recession.
 - **Impact on business:** About a quarter of the businesses reported that finance market conditions had had no impact on business activities or performance over the past 12-18 months. By contrast, during the recession, tighter finance market conditions had led to adverse consequences for several businesses, the most significant being redundancies and reduced levels of investment in new equipment, product development and training.
 - **Use and impact of AR finance products:** All of the interviewees used factoring. The main business benefits that were cited included:
 - ⇒ **Flexibility:** the main advantage of AR finance is that money is available quickly, allowing the businesses to spend and invest in line with growth in the order book. Several interviewees reported that the 'charm' of factoring was its flexibility. By contrast several interviewees complained that banks were becoming very conservative and risk averse in terms of their loan and overdraft products.
 - ⇒ **Value:** several businesses commented that factoring was not only more flexible than loans or overdraft but also cheaper.
 - **Future financing:** almost all of the businesses said that they expected to maintain or increase their use of AR financial products over the next 12 months. Several said that they use factoring for as much as 85%-95% of all their invoices. The majority of interviewees also expected to utilise bank loans or other forms of complementary finance.

Company interviews

- 4.7 A total of 19 German businesses were interviewed, all of which are current users of AR financial instruments and are clients of GE Capital (i.e. GE Heller)²⁷ As was the case with France, the interviews were conducted with senior managers at the businesses, usually the Finance Director or other senior company executives. A brief summary of the responses to the key themes of the topic guide are provided below.
- **Business environment:** almost all of the businesses reported a significant improvement in business conditions since 2009. A number of the businesses are export-orientated, and these companies reported a marked improvement in trading over the past 12 months, with Asian markets being particularly strong.
- 4.8 The current users of AR finance interviewed for this study were, overall, very positive about their experiences, as the following selection of responses attests:
- (1) We have had a very positive experience with factoring since we started using it in 2009. It works really well for

²⁷ The 19 businesses averaged 364 employees, ranging from a minimum of 95 to a maximum of 1,020. Annual turnover ranged from around 18 M€ to around 500 M€, averaging around 102 M€. The size profile of the businesses interviewed in Germany is therefore different to France, where the average company size was 135 employees and 30 M€ turnover. The German geographical distribution was widespread, with businesses based across southern, northern and western Germany (albeit only one was located in the former DDR). The distribution of the sample of interviews across sectors was somewhat orientated towards manufacturing. However, within the broad heading of manufacturing there was representation across a range of different industries, including automotives, machine tools, foodstuffs, clothing and toys. Other sectors represented included professional services and logistics

us because our main customers have a very good credit standing and therefore factoring providers are happy to deal with them.

- (2) We have a very good experience with factoring. The flexibility is fantastic, and it is very easy to use. Factoring is becoming more and more important as our turnover increases.
- (3) Factoring is a great tool for us. We find that long term bank finance is difficult for us to access because of our ownership arrangements. We have no such problem with factoring, and it is a very flexible instrument for us to use.
- (4) We are extremely happy with factoring – it is superb. We use factoring a lot more than overdrafts because it is cheaper and more flexible. It is perfect for us.

Current and potential future importance of AR Finance

- 4.9 There is evidence that German companies who experienced factoring for the first time during the recession (as other sources of business credit became comparatively more constrained) are now using factoring to finance their recovery – funding investment in equipment purchases, raw materials or intermediate goods supplies and restocking.
- 4.10 It would appear that factoring has a lingering image problem in Germany; unless companies have used it, they seem to think it is a financing instrument of last resort, taken advantage of by companies who are close to bankruptcy. Once companies have used it, they are surprised by how easy it is to use, how much independence it offers when compared with bank capital and how flexibly it adjusts to changing financing needs.
- 4.11 Overall, the expectations for the future of the factoring industry in Germany are very good. However, there is strong awareness that the economic recovery is still fragile, to some extent bolstered by what is seen as a somewhat 'artificial' public sector stimulus package, and there is no certainty as to how sustainable the upturn will be.

The Reference Case

- 4.12 Based on the analysis of background and GE Capital customer data, as well as the stakeholder and company interviews, SQW has estimated the current contribution of AR finance to the German economy. As for France, the starting point is to establish the reference case. The first table below sets out the expected future levels of quarterly economic output across all sectors for Germany, measured in B€ (using 2005 prices). The results are also presented as an index, where 2007Q4 = 100.0. The table also presents expected future levels of aggregate employment (measured in thousands). All data in the table below are based on econometric forecasts dated April 2011.

Table 4-1: Reference Case: Economic Output and Employment, Germany, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
Output B€	542.5	543.5	571.1	593.5	641.4
Output Index	100.0	100.2	105.3	109.4	118.2
Jobs ('000s)	35,499	36,112	36,440	36,516	36,119
Jobs Index	100.0	101.7	102.6	102.9	101.7

Source: SQW, based on Oxford Economics forecasts

- 4.13 Under the reference case, the German economy is predicted to grow to 641 B€ per quarter (2005 prices) by 2020Q4, growth of around 18% compared to the level of 2007Q4. Aggregate employment over the same period is expected to grow by 1.7%, to 36.1 million. It should be noted that the underlying forecast for employment includes a decline of 1.2 million jobs in Germany between 2015 and 2020.

Current contribution scenario

- 4.14 The next step is to consider the current and expected future contribution of current levels of usage of AR financial products in Germany. As was the case with France in the previous Chapter, this assessment has been conducted by estimating the potential impact of a hypothetical withdrawal of AR financing products from the Germany market, starting in 2011.
- 4.15 The first step was to model the potential immediate impacts of the hypothetical withdrawal of AR finance to the German economy. The estimated impact of this hypothetical scenario – which was constructed in order to estimate the underlying value of AR finance to the German economy – was the loss of 3.2B€ in quarterly economic output for the German economy in 2011Q4.
- 4.16 The German economy is expected to grow by around 18% over the 2007-2020 period, but without the support of AR financing, this growth would be significantly reduced. The additional quarterly economic output that is attributable to the availability of AR finance is estimated to be worth just over 18B€ per quarter by 2020, which is about 16% of the quarterly volume of growth otherwise expected to be achieved by this period of time.
- 4.17 With respect to employment, under the reference case, the German economy is expected to add around 620,000 jobs over the 2007-2020, but a significant proportion of these jobs would be lost if AR financing wasn't available. We estimate that there would be 322,000 fewer jobs in Germany by 2020 (compared to 2007) if AR instruments were unavailable in Germany from 2011.
- 4.18 Moreover, the immediate impact of a hypothetical loss of AR finance is estimated to be a loss of 108,000 jobs in the German economy in 2011Q4.
- 4.19 The results for economic output and jobs are set out below:

Table 4-2: Current contribution: Economic Output and Employment, Germany, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
Output B€	542.5	543.5	566.2	585.9	623.1
Output Index	100.0	100.2	104.4	108.0	114.9
Jobs ('000s)	35,499	36,112	36,303	36,340	35,797
Jobs Index	100.0	101.7	102.3	102.4	100.8

Source: SQW

4.20 The table below summarises the difference between the “current contribution” and the reference case for Germany, focusing on the differences in the indexed results of the two scenarios:

Table 4-3: Current contribution scenario: Compared to Reference Case, Germany, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.00	-0.91	-1.41	-3.36
ΔJob Index	0.00	0.00	-0.31	-0.50	-0.91

Source: SQW

4.21 As well as the situation regarding the overall economy, we have examined the situation under the “current contribution” case with specific reference to manufacturing, given the particular importance of AR financing to manufacturing businesses in Germany.

Table 4-4: Counterfactual scenario – impact on manufacturing, Germany, 2007-2020

Indicator	2013Q4	2015Q4	2020Q4
Output (overall) B€	-5.0	-7.6	-18.2
Jobs (overall, '000s)	-136.7	-176.3	-322.2
Output (manufacturing) B€	-2.3	-3.9	-10.4
Jobs (manufacturing, '000s)	-47.4	-72.4	-162.8

Source: SQW

4.22 Thus, of the 18.2 B€ of expected growth in quarterly economic output (by 2020) dependent on the availability of AR financing, 10.4 B€ (57%) is located in the manufacturing sector. Similarly, of the 322,000 additional jobs that are dependent on AR financing, nearly 163,000 are found in the manufacturing sector.

Growth scenario

4.23 Having considered the current and expected future contribution of the existing levels of AR financing, the next task is to develop a future scenario that examines what the future might look like if more companies in Germany were aware of and able to take advantage of the business benefits that AR financing provides. The results are set out below.

Table 4-5: Growth Scenario: Economic Output and Employment, Germany, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
Output B€	542.5	544.1	574.3	599.6	660.0
Output Index	100.0	100.3	105.9	110.5	121.7
Jobs ('000s)	35,499	36,114	36,471	36,584	36,341
Jobs Index	100.0	101.7	102.7	103.1	102.4

Source: SQW

4.24 The table below summarises the difference between the growth potential scenario and the reference case, focusing on the differences in the indexed results of the two scenarios.

Table 4-6: Growth scenario: Compared to Reference Case, Germany, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.11	0.58	1.13	3.43
ΔJob Index	0.00	0.01	0.09	0.19	0.62

Source: SQW

4.25 The implications of these results are as follows:

- the German economy is expected to grow by around 18% over the 2007-2020 period, but we estimate that if the potential of AR financing was exploited in full then the extent of overall growth could be considerably greater. We estimate this additional growth potential to be around an extra 18.6 B€ in quarterly economic output, which would be an additional uplift of 2.9% in economic output over the 2020Q4 level expected under the reference case. This uplift in economic output performance is equivalent to an additional 0.22% per year in average annual growth rate over the 2007-2020 period.
- For employment, under the reference case, the German economy is expected to add around 620,000 jobs over the 2007-2020, but with AR financing used to its full potential we estimate that there could be an additional 221,000 jobs in Germany by 2020 compared to the expected situation under the reference case.

4.26 As we did for France, we have also examined the situation under the full potential scenario for manufacturing.

Table 4-7: Growth scenario – impacts on manufacturing, Germany, 2007-2020

Indicator	2013Q4	2015Q4	2020Q4
Output (overall) B€	3.2	6.1	18.6
Output (manufacturing) B€	2.2	4.3	13.2
Jobs (overall, '000s)	31.1	68.3	221.7
Jobs (manufacturing, '000s)	24.9	54.6	176.6

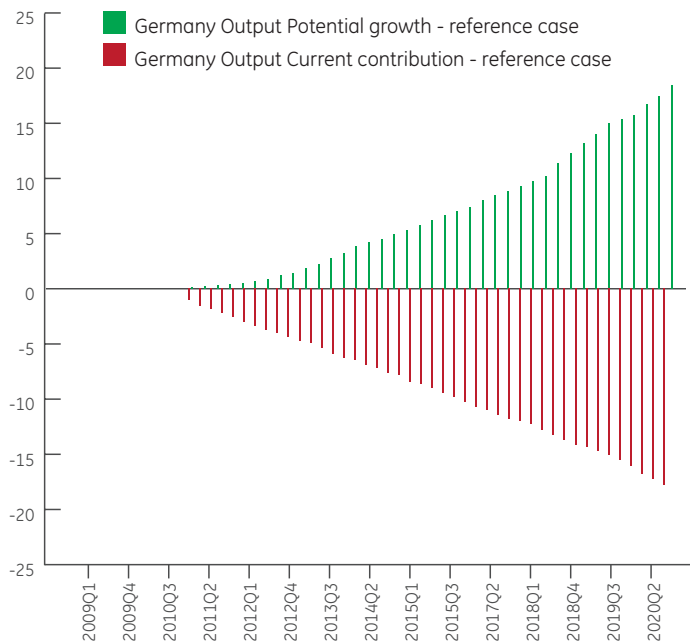
Source: SQW

4.27 Thus, of the 18.6 B€ of additional quarterly economic output that could be available by 2020Q4 if AR financing was used by German businesses to its full potential, 13.2 B€ (70%) is located in the manufacturing sector. Similarly, of the 221,000 additional jobs that stand to be delivered if AR financing was used to its full potential in Germany, 177,000 are found in the manufacturing sector.

Summary of Potential Combined Impacts

4.28 The combined impact of the “current contribution” and accelerated growth scenarios can be considered as the total potential added value of AR finance to the German economy. The chart below shows this incremental additional value – in terms of economic output – over the 2011-2020 period. The total value that stands to be generated by 2020 is just under 37B€ per quarter, consisting of 18.2B€ of underlying value and 18.6B€ of new additional growth potential.

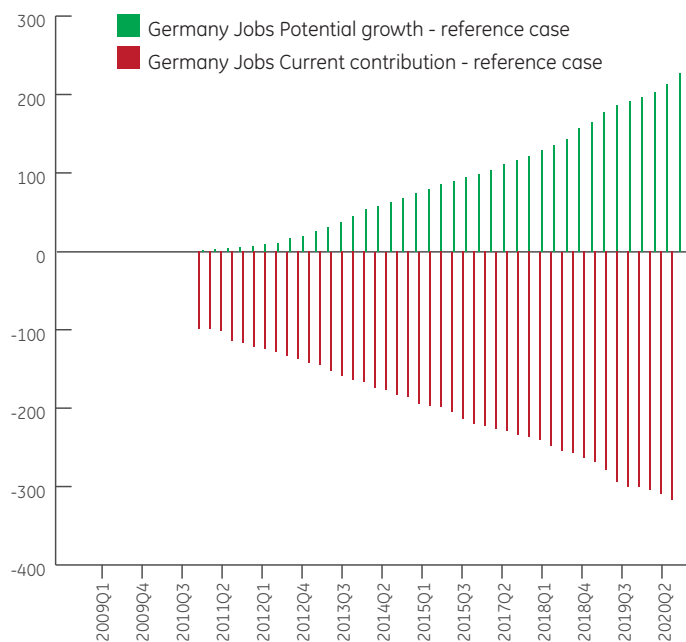
Figure 4-3: Combined impact of the Growth and Underlying Contributions: Output (B€)



Source: SQW

4.29 The next chart shows the same effect, but this time for employment. The chart shows that by 2020, 544,000 additional jobs stand to be gained, consisting of around 322,000 jobs supported with the current/underlying contribution and 222,000 new jobs that could be gained through accelerated growth potential.

Figure 4-4: Combined impact of the Growth and Underlying Contributions: Jobs ('000s)



Source: SQW

Case Study: Seidensticker

Founded in 1919, Seidensticker is an established German shirt brand. The third-generation family business is Europe's leading shirt company and one of the top three shirt manufacturers worldwide. Headquartered in Bielefeld, Eastern Westphalia, the company employs 2,000 people, including 50 creative professionals involved in developing 35 product collections, and 16 million garments worldwide each year.

The Seidensticker business is based upon three columns: brands, private labels and own retailer. With a presence in 80 countries and more than a third (36%) of sales going to export markets, the country has a complex web of payment terms with retailers and customers.

Since 2002, Seidensticker has used a factoring solution from GE Capital. GE Capital supports the growth of the company as a financing partner with the assurance of permanent liquidity and financial independence. For the applied open Intercredit-process, risk protection is the main focus. If a Seidensticker client fails to pay after an unsuccessful reminder notice, GE Capital carries the debt collection and the risk.

Jens Wächter, Head of Finance, Seidensticker says:

"Factoring offers permanent liquidity and guarantees requests made and has proven to be a dependable and alternative financing solution."

5: Italy

Context

- 5.1 The economic crisis reached its peak in Italy in early 2009, after which the economy began to recover slowly. Since the start of the recovery from summer 2009 onwards, the Italian economy has recouped only 2 of the 7 percentage points of output lost in the recession. In the first quarter of 2011 the growth rate for economic output in Italy was barely positive²⁸.
- 5.2 The Italian financial system did not suffer major shocks during the financial crisis, but nevertheless it became increasingly risk averse. More recently, however, banks have increased their lending to businesses in response to the recovery in demand for working capital. The rate of growth in the twelve months to April was 4.4%, the highest among the main Eurozone countries²⁹.
- 5.3 In 2010, the share of Banks' finance over the total of Italian firms' financial debts amounted to 67%, while the percentage of short term finance was 37%.³⁰ In this context, the Italian factoring market is one of the largest in Europe. Italian factoring represents approximately 8% of the national GDP and, on average, more than 10% of trade credit and 11% of short-term bank financing³¹. However, the factoring market is a very concentrated one; 50% of discounts are handled by the three major providers³².
- 5.4 According to ASSIFACT (the Italian Factoring Association), the overall turnover of members amounted in 2009 to about 118 B€³³. This figure constantly grew to date, parallel to that of the acquired credits; these reached an increase of 32% in April 2011 compared to the previous year³⁴. Manufacturing companies represent the largest proportion of users³⁵.

Stakeholder interviews

- 5.5 The stakeholders interviewed in the survey represent the most relevant institutions in Italy, with respect to financial and industrial key actors. A detailed discussion under various headings is provided below:
- **Demand for working capital:** The demand for working capital in recent times has been driven by two contrasting forces. On the one hand, firms suffered a reduction in their activities, thereby reducing the need for working capital; by contrast, they also suffered delayed payments by their customers which increased demand for working capital. However, the first element dominated the second, causing something of an overall decrease in the demand for working capital. The situation is now reversing, albeit slowly. Available surveys show few current signs of discouraged demand. The need of working capital finance is a permanent characteristic of Italian SMEs.

- **Availability and cost of working capital:** Consultees recognised that Italy had witnessed a reduction in the availability of working capital finance during the recession, with differences across different sectors. A more severe constraint operated towards smaller companies, particularly SMEs. Medium-to-large companies, on the other hand, had fewer problems, and more opportunities to raise capital through other means, such as bond issues. More recently, there has been a gradual increase in interest rates. This will cause a gradual increase in working capital direct costs. However, this is something not unexpected, and can be absorbed by revived markets. SMEs remain worried by the increase in indirect costs (terms, conditions, procedures and times).
- **Impacts on business and sectors:** The Italian industrial landscape is characterised by an overwhelming presence of small and micro enterprises. Access to adequate working capital can be vital for enterprises with a fragile financial structure (significant debt exposure), especially in periods of low demand. SMEs, particularly micro-enterprises, have been the most disadvantaged. Regarding other criteria, low added value service companies, start-ups and subcontracting firms (particularly if small) faced more constraints than others. Sectors that were particularly disadvantaged included construction and the small retail sector.
- **Trends in finance costs, and impacts of these on business and sectors:** Consultees broadly agreed that finance costs have been low but can be expected to trend upwards in line with the upwards trend in European Central bank (ECB) rates.³⁶

A spokesperson for capital users commented that, apart from trends in interest rates, as decided by ECB, an increase in working capital fees has been observed. Also, as well as increase in direct costs, indirect costs have increased in terms of bureaucratic burden and reply time by banks. However, from the point of view of lenders, the level of risk for them has substantially increased, with a visible growth of uncollectible accounts.

One commentator observed that the Italian factoring market has grown, in the first months of 2011, both in turn over and out standing. Such a positive trend, together with the perception that demand for factoring may anticipate the economic cycle, is confirmed by a strong optimism on the operators' side concerning a positive market development in 2011. Factoring cost changes will reflect market rate changes. It is foreseeable that they will remain lower than those of other type of finance. Therefore, in principle, one can expect factoring to continue growing. Basel III requirements, particularly as for risk profile and liquidity conditions for banks, could support this trend.

²⁸ Banca d'Italia, *The Governor's Concluding Remarks*, Rome, May 2011.

²⁹ Banca d'Italia, *cit.*

³⁰ Italian Parliament, Camera dei Deputati, *Hearing of the Bank of Italy: Survey on the financial markets*, Rome, 2011.

³¹ Carretta A. (Ed.), *The demand for factoring*, SDA Bocconi School of Management, Milan, 2009.

³² Callari, M. *Welcome Speech to Assifact Factoring Tour*, Turin, 2011.

³³ Assifact, *Il ruolo del factoring nell'Economia Italiana*, Milano, 2011.

³⁴ Assifact, *Annual Report to Members*, Milan, 2010.

³⁵ Assifact, *Il ruolo...*, *cit.*

³⁶ Note: the interviews with stakeholders in Italy took place before the ECB announced an increase in base rates on 7th July 2011

Company interviews

5.6 A total of six Italian businesses were interviewed, all of which are current users of AR financial instruments³⁷. A brief summary of responses to the key themes is provided below.

- **Business environment:** All of the businesses described that operating conditions had been difficult over the 2009-2010 period, but that conditions and prospects were beginning to show improvement.
- **Cash flow position and financing:** Five of the six businesses had not experienced particular difficulties in obtaining working capital finance during the recent economic downturn. The business representative who expressed a contrary view had experienced difficulties during 2009, but since that time the cash flow position had stabilised (following significant cost-cutting) and the situation regarding finance had recently improved.
- **Use, availability and cost of finance:** All of the businesses used a variety of financial instruments, including bank loans and AR. Although the majority reported that the availability of finance had not been a particular constraint, one had experienced difficulties due to a weak cash flow position. This situation had now improved. A number of the smaller businesses reported that bank overdrafts have become more difficult to obtain, and that the administrative burden associated with this mechanism had increased significantly.
- **Impact on business:** About half of the businesses said that finance market conditions hadn't adversely affected their activities or performance over the past 12-18 months. By contrast, during the recession, a rationing of finance had led to negative consequences for several businesses, including cost cutting manifested by loss of employees and reduced spending on new equipment and new projects.
- **Use and impact of AR finance products:** All but one of the businesses currently uses factoring, and the sixth is actively considering its utilisation. The main benefit highlighted was the flexibility of the instrument. As one business put it:

Overall we are very positive about factoring as it gives us headroom in terms of our cash flow throughout the year, and having the regular cash flow throughout the year allows us to manage our costs more effectively.

All of the businesses reported recent increases in finance costs, and it seems that factoring and invoice discounting costs are also increasing. These comments may reflect a less developed market for factoring in Italy, with perhaps scope for increased competition from new entrants. As one company put it:

We tend to avoid factoring, because we have found it to be expensive. We have only used it in projects with very specific characteristics.

³⁷ However, the size profile of the businesses was significantly different to the other samples: whereas four of the businesses shared the SME profile of the other firms in the other countries (e.g. employee numbers ranging from 77-410), two of the businesses were significantly large, with employee numbers circa 6,000-7,000. Moreover, in terms of turnover, four of the businesses had turnover of 1 billion Euro or more. In sectoral terms, all of the businesses were involved in manufacturing, covering sectors such as plastics, electrical goods, automotive coatings and fuels. The geographical distribution was concentrated in northern Italy.

Current importance of AR Finance to the Economy

The Reference Case

5.7 Based on the analysis of background data, plus the stakeholder and company interviews, SQW has estimated the current contribution of AR finance to the Italian economy. As for the other countries, the starting point was to establish the reference case. The first table below sets out in turn the expected future levels of overall quarterly economic output across all sectors for Italy to 2020, measured in B€ (using 2005 prices). The results are also presented as an index, where 2007Q4 = 100.0. The table also presents expected future levels of aggregate employment (measured in thousands). All data in the table below are based on econometric forecasts dated April 2011.

Table 5-1: Reference Case: Economic Output and Employment, Italy, 2007-2020

Indicator	Baseline 2007Q4	Current 2010Q4	Short-term 2013Q4	Medium-term 2015Q4	Long-term 2020Q4
Output B€	311.9	300.5	310.4	320.3	340.9
Output Index	100.0	96.3	99.5	102.7	109.3
Jobs ('000s)	18,000	16.967	17.102	17.179	17.177
Jobs Index	100.0	94.3	95.0	95.4	95.4

Source: SQW, based on Oxford Economics forecasts

5.8 Under the reference case, the Italian economy is expected to grow to some 341 B€ (2005 prices) per quarter by 2020Q4, growth of only around 9% compared to the level of 2007Q4. This is about half the rate expected of the French and German economies considered earlier. Aggregate employment over the same period is expected to decline by some 4.6%, to 17.2 million. Again, this is in considerable contrast to the other economies considered in this report (including the UK, considered in the next chapter).

Current Contribution scenario

5.9 The next step is to consider the current and expected future contribution of AR financial products. This assessment has been conducted by estimating the potential impact of a hypothetical withdrawal of AR financing products from the Italian market, starting in 2011.

5.10 The first step was to model the potential impact of an immediate withdrawal of AR finance on the Italian economy. The estimated impact in output terms of this hypothetical situation would be a loss of 3.8B€ in quarterly economic output in 2011Q4. This, in effect, is an estimate of the current contribution of AR finance to the Italian economy in output terms.

5.11 In terms of the future beyond 2011, although the Italian economy is expected to grow by only 9% (in output terms) over the 2007-2020 period, without the support of AR financing the level of growth that would be expected would be considerably less. The additional economic output that is attributable to AR finance is estimated to reach approximately 11.9 B€ per quarter by 2020.

5.12 In terms of employment, the immediate impact of a withdrawal of AR finance is expected to be the loss of around 123,000 jobs to the Italian economy. That is, at least 123,000 jobs are estimated to be currently (2011Q4) underpinned by the availability of AR financial products in Italy.

5.13 The future situation regarding employment is complicated by the fact that under the reference case the level of employment in Italy is expected to decline over the period we are considering. Under the reference case, the Italian economy is expected to lose around 823,000 jobs over the 2007-2020 period, but even more would be lost if AR financing wasn't available. We estimate that there would be approximately 461,000 fewer jobs in Italy by 2020 (compared to 2007) if AR instruments were unavailable there. The results for economic output and jobs are set out below.

Table 5-2: Current contribution Case: Economic Output and Employment, Italy, 2007-2020

Indicator	Baseline 2007Q4	Current 2010Q4	Short-term 2013Q4	Medium-term 2015Q4	Long-term 2020Q4
Output B€	311.9	300.5	305.64	314.1	329.0
Output Index	100.0	96.3	98.0	100.7	105.5
Jobs ('000s)	18,000	16,967	16,936	16,951	16,716
Jobs Index	100.0	94.3	94.1	94.2	92.9

Source: SQW

Table 5-3: Current contribution scenario: Compared to Reference Case, Italy, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.00	-1.53	-2.00	-3.82
ΔJob Index	0.00	0.00	-0.92	-1.27	-2.56

Source: SQW

Growth scenario

5.15 Having considered the current and expected future contribution of the existing levels of AR financing, the next task is to develop a future scenario that examines what the future might look like if more companies in Italy were aware of and able to take advantage of the business benefits that AR financing provides. The results for economic output and jobs are set out below.

Table 5-4: Growth Scenario: Economic Output and Employment, Italy, 2007-2020

Indicator	Baseline 2007Q4	Current 2010Q4	Short-term 2013Q4	Medium-term 2015Q4	Long-term 2020Q4
Output B€	311.9	300.9	312.5	324.4	353.1
Output Index	100.0	96.5	100.2	104.0	113.2
Jobs ('000s)	18,000	16,970	17,133	17,249	17,411
Jobs Index	100.0	94.3	95.2	95.8	96.7

Source: SQW

5.16 The table below summarises the difference between the growth potential scenario and the reference case, focusing on the differences in the indexed results of the two scenarios.

Table 5-5: Growth scenario: Compared to Reference Case, Italy, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.14	0.68	1.30	3.90
ΔJob Index	0.00	0.01	0.17	0.39	1.30

Source: SQW

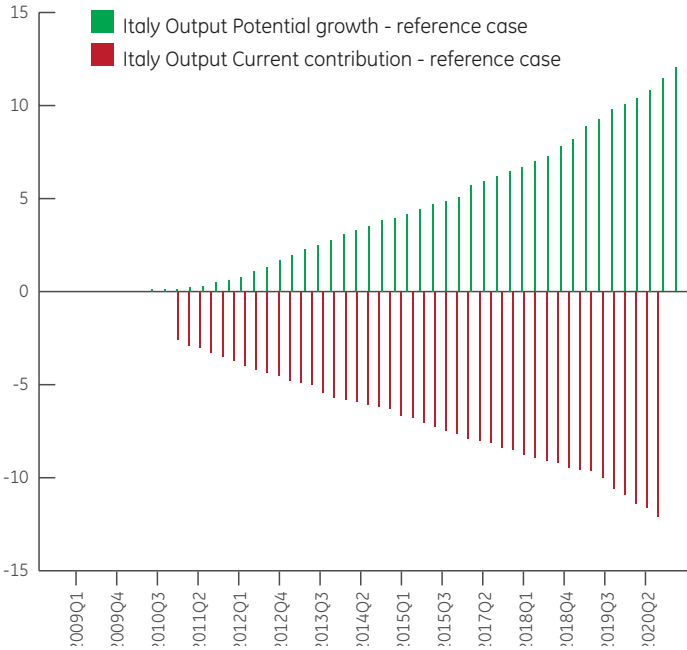
5.17 The Italian economy is expected to grow by around 9% over the 2007-2020 period, but if the potential of AR financing was exploited in full then the extent of overall growth could be significantly greater. We estimate this additional growth potential to be around an extra 12.2 B€ per quarter, which would be an additional uplift of 3.6% in economic output over the 2020 level expected under the reference case. This uplift in economic output performance is equivalent to an additional 0.36% per year in average annual growth rate over the 2007-2020 period.

5.18 Under the reference case, the Italian economy is expected to lose around 823,000 jobs over the 2007-2020, but with AR financing used to its full potential we estimate that there could be 234,000 fewer net job losses in Italy by 2020, compared to the expected situation under the reference case.

Summary of Potential Combined Impacts

5.19 The combined impact of the current contribution and accelerated growth scenarios can be considered as the total potential added value of AR finance to the Italian economy. The chart below shows this incremental additional value – in terms of economic output – over the 2011-2020 period. The total value that stands to be generated by 2020 is just over 24B€ per quarter, consisting of around 11.9B€ of underlying value and 12.2B€ of new additional growth potential.

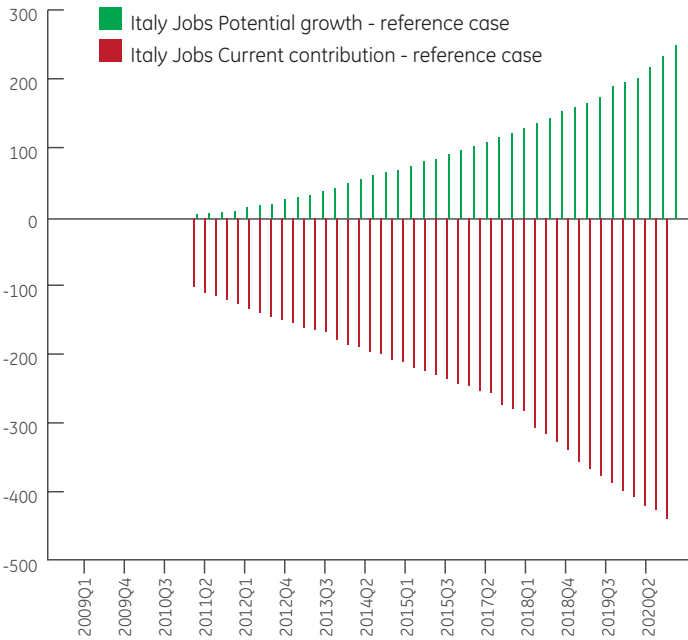
Figure 5-1: Combined impact of Growth and Underlying Contributions: Output (B€)



Source: SQW

5.20 The next chart shows the same effect, but this time for employment. The chart shows that by 2020, that 694,000 additional jobs stand to be gained in Italy, consisting of around 461,000 jobs supported under the current contribution case and 234,000 additional jobs that could be gained through accelerated growth potential.

Figure 5-2: Combined impact of Growth and Underlying Contributions: Jobs ('000s)



Source: SQW

Case Study: Vulcaflex S.p.A

Vulcaflex is a leading manufacturer of calendered and coated foils and films. Calendering is a finishing process used on cloth where fabric is folded in half and passed under rollers at high temperatures and pressures. The company can be considered as a “converter of plastics”, supplying customers in four main sectors: the automotive industry, packaging, fashion and industrial applications.

Established in 1947 in Milan by Mr Attilio Bozzi, in 1965 the company transferred its industrial activity from Milan to Cotignola, near Ravenna. Following constant developments, in 1986 Vigotex was incorporated and few years later a third plant in Cotignola was converted specializing in the finishing of Vulcaflex’s products.

Vulcaflex has always supported environmental issues and together with Solvin Italia, Adriaplast and Tecnometal, joined the project Vinyloop: the first plant in the world to recycle PVC from multi-layer film waste. In 2002 the Vinyloop plant in Ferrara was opened. Today Vulcaflex is a leader in its market sector, with an export rate of over 75% of its sales. An extensive network ensures a growing presence in world markets.

In the most recent years, Vulcaflex has been experiencing a very fast growing (turnover +25% 2010 versus 2009), especially in the foreign markets, that now contribute for over 75% of its sales. To support this continuous expansion through an even more extensive global network and in order to optimize and increase its short term sources of financing, Vulcaflex has agreed an Account Receivable facility that aims to demobilize credits. The company utilizes up to around € 2M of funding to continue trading, working alongside other ‘traditional’ sources of commercial finance.

6: United Kingdom

Context

6.1 The post-recession UK economic recovery remains sluggish and patchy. While many SMEs suffered in the downturn, the majority have demonstrated resilience, and many recognise domestic and international business development opportunities and are keen to respond. However, access to finance is essential if SMEs are to develop to their potential and grow, and thereby contribute to a return to national economic prosperity and re-balancing. Evidence on whether the current state of the credit market is a constraint or otherwise is still somewhat mixed. On the one hand, evidence from successive and most recent Bank of England lending surveys indicates that the stock of lending to SMEs has continued to contract. The latest Trends in Lending report (April 2011) from the Bank of England indicates that lending to businesses declined by £5 billion in the three months to February 2011.³⁸ This followed a decline in lending to businesses reported in the previous quarterly report of the same magnitude.³⁹ Gross lending to businesses by banks and building societies has been consistently in decline since 2009Q2, with rates of repayment exceeding new lending since then.

6.2 Moreover, data from BIS indicates that the annual rate of growth in lending to SMEs has been negative since late 2009 and fell to -3% in February 2011.⁴⁰ Meanwhile, data published by the British Bankers' Association (BBA) indicates that the growth rate of lending to small businesses stood at -6% in December 2010.⁴¹

6.3 The April Trends in Lending survey indicated that one of the reasons for diminished lending to SMEs is muted demand. In particular:

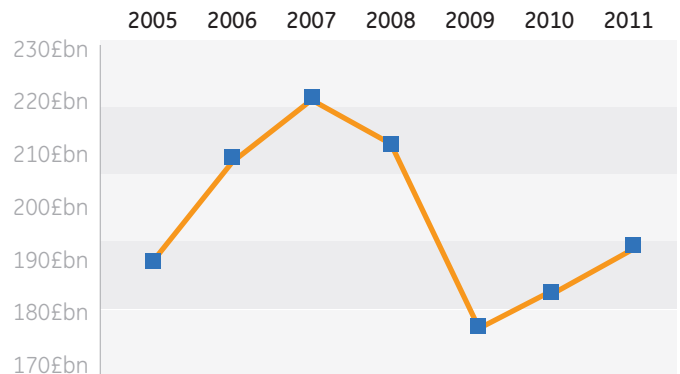
*BIS data indicated that the value of applications by SMEs for new term loan and overdraft facilities in the six months to February was 19% lower than in the same period a year earlier. Some lenders reported that demand for credit remained muted because SMEs were cautious about business prospects.*⁴²

6.4 According to the 2010 small business finance survey published jointly by the CBI and ACCA⁴³, the recovery is creating a need for working capital and therefore a latent demand for credit. However, only a portion of this need translates into effective demand, partly because of a discouragement effect; the perception that bank credit might be more scarce than is actually the case.

6.5 According to recent GE market data, the market for factoring increased in the UK in the past 12 months, growing by around 4.5% to circa \$US300 billion. GE market share also increased, to around 4 percent.

6.6 The chart below shows recent trends in the overall volume of the factoring market in the UK. The data indicate a significant decline in business during 2008 and 2009 recession, with the volume of trade starting to grow again from 2010 onwards.

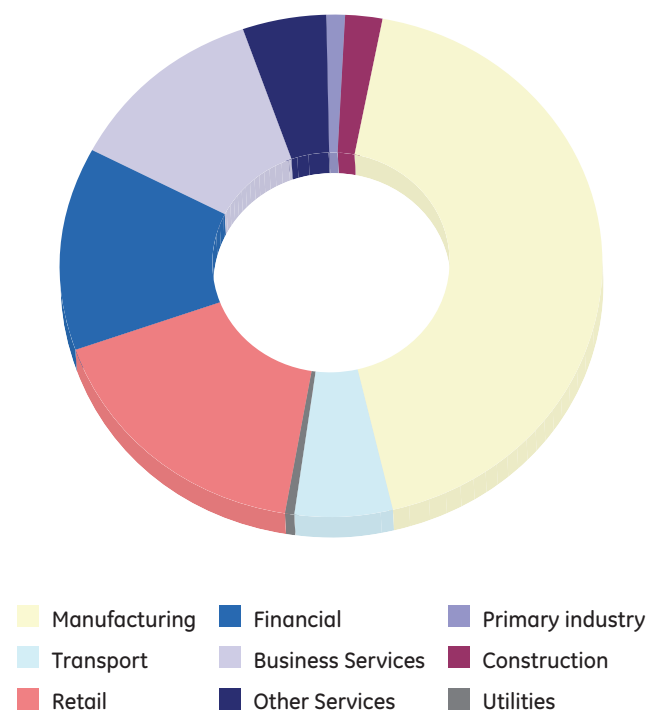
Figure 6-1: Recent trends in the volume of factoring in the UK, £ billions



Source: SQW, from various sources

6.7 GE Capital supplied data showing recent trends in their AR finance business in UK for a range of instruments. The sectoral breakdown of provision for December 2010 is as follows.

Figure 6-2: Sectoral distribution of GE Capital Factoring in the UK



Source: GE Capital, interpreted by SQW

6.8 It can be seen from the chart that the orientation of the business in the UK (by value) is focused towards Manufacturing (over 60%), with Retail & Distribution (18%) and Financial services (13%) also important. The GE Capital data also shows a strong rebound in growth in demand, especially since the September 2010 quarter.

³⁸ Trends in Lending: Bank of England, April 2011, page 4

³⁹ Trends in Lending: Bank of England, January 2011, page 4-5

⁴⁰ Monthly BIS survey, reported in Trends in Lending: Bank of England, January 2011, page 7

⁴¹ Small Business Support, British Bankers Association, December 2010

⁴² Trends in Lending: Bank of England, April 2011, page 7

⁴³ Small Business Finance and the Recovery: CBI and ACCA, 2010

Stakeholder interviews

6.9 A brief summary of the responses to the key themes of the topic guide are provided below.

- **Demand for working capital:** Overall demand for working capital has not changed markedly since 2009. Demand for AR financing is generally increasing, although it remains overall a relatively modest source of finance in terms of the proportion of firms that look to use it. Data suggest only around 6 percent of firms currently use factoring/invoice discounting. There is scope to increase this proportion significantly. A lot of SMEs in particular simply do not know about AR financing, and while it may not suit or be appropriate for all businesses, there are many who would benefit with an introduction to it.
- **Availability and cost of working capital:** Requirements for collateral and security for business loan finance have become more challenging. Some companies have certainly suffered from a rationing of capital. However, provision does remain in the market, and it has the potential to grow, but lenders are now very cautious about risk and cost is a function of risk. ACCA reported data showing an 85% success rate in terms of applying/getting non-bank finance compared to 75% for banks – but working capital can often be used as a substitute for additional finance rather than for core lending i.e. to substitute for a loan or trade credit that they couldn't get rather than central finances. In terms of particular types of finance:
 - ⇒ **Bank loans:** many overdrafts have been converted into loans, they are more expensive and less convenient for firms so become more common as better for the banks
 - ⇒ **Overdrafts:** these have reportedly 'fallen off a cliff' in the last couple of years. For SMEs provision of overdraft facilities is down by about 25%. The instrument is essentially 'dead' for SMEs as bank capital requirements have got harder to meet and more challenging. Additionally, it has now become very difficult for firms to access a new overdraft facility.
 - ⇒ **Invoice/payment terms:** trade credit is a key part of the mix and needs to be fully factored in. For short-term lending trade credit is actually the key form of finance for many SMEs in particular.
 - ⇒ **Factoring & invoice discounting:** As an instrument it is not for everyone. It can be expensive and a strong order book is needed to make it viable. Further, it is reliant on a company's customers being good for their invoices, so demand is restricted.
- **Impacts on business and sectors:** If working capital is restricted then investments do take a back seat as SMEs are wary about losing staff and capacity, so they do tend to hold on to the staff and machinery/assets they already have. However, generally speaking, SMEs have become savvier about managing their credit. Demand does vary across sectors, and some sectors need more specialised provision (e.g. in transport sectors there is greater demand for forms of asset-backed lending). Sectors with diverse supply chains – such as aerospace and automotive – have particular issues, where suppliers are often small and the customers are large. Suppliers in these circumstances are very sensitive to changes in the availability, cost and terms of working capital provision.

- **Trends in finance costs:** The consensus generally was that the key issue is not so much cost but access to and the availability of finance. Issues around 'cost' are actually much more to do with risk, given that there is a good level of competition in the market. However, it is acknowledged that discounting rates did generally go up last year, so it started to cost more to make use of working capital products.
- **Expected future trends:** Generally, consultees took a positive or cautiously positive outlook. Respondents pointed to evidence that demand for some types of business credit is going up (albeit gradually).

Company interviews

6.10 A total of 12 UK businesses were interviewed, all of which are current users of AR financial instruments and are clients of GE Capital. As for the other countries, the interviews were conducted with senior managers at the businesses, usually the Finance Director or other senior company executives.

6.11 A brief summary of the responses to the key themes of the topic guide are provided below.

- **Business environment and performance:** there was no clear or consistent pattern regarding business conditions from the companies interviewed. Whereas several manufacturers (particularly those who were export orientated) reported a strong uplift in demand for their products, for the more domestic-focused companies business trends were decidedly mixed, with several expressing very cautious (even pessimistic) views regarding current conditions and near-term prospects. On the other hand, several of the businesses did report strong growth trends over the past 12 months and were optimistic about short-to-medium term prospects.
- **Cash flow position and financing.** When asked about cash flow the responses tended towards the upbeat, with only two describing it as 'weak'. The UK interviewees tended to be more upbeat than France but less so than Germany.
- **Cost and availability of finance.** Regarding obtaining of finance over the past 12 months, most businesses reported having experienced no difficulties, and several commented that they had detected a loosening of the market for finance and that costs were becoming more competitive. Several of the interviewees commented that they were developing new overseas markets but had found difficulties in obtaining loan finance from UK lenders. One business reported that their finance was ultimately coming from a non-European bank to fund a project in Asia. For another, the solution was likely to involve asset based lending, but a third identified that invoice discounting was an important source of finance to support the expansion of overseas markets.

Use of AR Finance: Most of the businesses interviewed utilised factoring and a significant proportion used invoice discounting. These AR products were used alongside other facilities such as bank loans, trade credit, equipment leasing and (in one case) a property mortgage. One main advantage of invoice discounting was that it gave cash flow headroom throughout the year. Several businesses reported that their reliance on invoice discounting had increased so that bank debt could be repaid. One interviewee commented that their reliance on AR finance

had increased as a direct consequence of the decision by lenders not to provide inventory lending in recent years. Several businesses (for whom demand for their products was seasonal) commented that AR finance was vital in helping them to smooth out seasonal peaks and troughs in cash flow and in building up inventories to cater for the periods when demand is greatest.

6.12 Overall, the current UK users of AR finance interviewed for this study were very positive about their experiences with this form of working capital finance:

- (1) *In a growing market invoice discounting is very well suited to the business; as turnover increases, the facility grows in line with it. We have seen growth coming for two years, and invoice discounting will be essential in allowing us to fund and cover growth.*
- (2) *Invoice discounting is our most important source of finance. It is also by far the most flexible, in terms of gearing up for growth – allowing us to purchase raw materials, for example.*
- (3) *Using factoring is really great. The cash is there when we need it. It's a simple process with cash processed and available quickly. We could not operate without this finance.*
- (4) *The key positive about invoice discounting is the flexibility that it offers, and this is vital for our business as demand for our products is quite seasonal. Invoice discounting allows us to build up stock in the six months prior to the onset of our busiest selling season – without this ability, we would find it very difficult.*
- (5) *The use of invoice discounting has been very important in supporting the longer term growth of the business. One key benefit has been support for cash flow as we have developed new international markets in Russia and the Middle East.*

Current and potential future importance of AR Finance

The Reference Case

6.13 Based on the analysis of background and GE Capital customer data, as well as the stakeholder and company interviews, we have estimated the current contribution of AR finance to the UK economy. As for the other countries, the starting point is to establish the reference case. The first table below sets out the expected future levels of overall quarterly economic output across all sectors for the UK, measured in £ billions (using 2005 prices). The results are also presented as an index, where 2007Q4 = 100.0. The table also presents expected future levels of aggregate employment (measured in thousands). All data in the table below are based on econometric forecasts dated April 2011.

Table 6-1: Reference Case: Economic Output and Employment, UK, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
Output £bn	270.1	259.8	282.6	298.8	334.1
Output Index	100.0	96.2	104.6	110.6	123.7
Jobs ('000s)	26,990	25,864	26,451	27,187	28,001
Jobs Index	100.0	95.8	98.0	100.7	103.7

Source: SQW

6.14 Under the reference case the UK economy is predicted to grow to £334 bn (2005 prices) per quarter by 2020Q4, i.e. growth of around 23.7% compared to the level of 2007Q4. Aggregate employment over the same period is expected to grow by 3.7%, to just over 28 million.

Current contribution scenario

6.15 The next step is to consider the current and expected future contribution of current levels of usage of AR financial products in the UK. This assessment has been conducted by estimating the potential impact of a hypothetical withdrawal of AR financing products from the UK market, starting in 2011.

6.16 The immediate (2011Q4) impact of the hypothetical loss of AR financial products is estimated to be £4.9 bn per quarter to the UK economy. That is, £4.9 bn of current (2011Q4) quarterly economic output is considered to be underpinned by the availability of AR finance.

6.17 Looking forward, the UK economy is expected to grow by nearly 24% over the 2007-2020 period, but without the support of AR financing, this growth would be rather less. The additional economic output that is attributable to AR finance is estimated to reach £10.7 bn per quarter by 2020.

6.18 As regards employment, under the reference case the UK economy is expected to add just over 1 million jobs over the 2007-2020 period, but a sizeable proportion of these jobs would be lost if AR financing was unavailable to UK firms. In terms of immediate effects, we estimate that 258,000 jobs are currently (2011Q4) underpinned by the availability of AR finance in the UK. That is, an estimated 258,000 jobs could be lost more or less immediately if AR financing were withdrawn.

6.19 In terms of future growth, we estimate that there would be 543,000 fewer jobs in the UK by 2020 (compared to 2007) if AR instruments were unavailable. The results for economic output and jobs are set out below.

Table 6-2: Current contribution Case: Economic Output and Employment, UK, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
Output £bn	270.1	259.8	276.8	291.9	323.4
Output Index	100.0	96.2	102.5	108.1	119.8
Jobs ('000s)	26,990	25,864	26,152	26,831	27,458
Jobs Index	100.0	95.8	96.9	99.4	101.7

Source: SQW

6.20 The table below summarises the difference between the current contribution and the reference cases for the UK, focusing on the differences in the indexed results of the two scenarios.

Table 6-3: Current contribution scenario: Compared to Reference Case, UK, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.00	-2.13	-2.54	-3.95
ΔJob Index	0.00	0.00	-1.11	-1.32	-2.01

Source: SQW

6.21 As with the other countries, we have also examined the situation under the current contribution with specific reference to manufacturing.

Table 6-4: Current contribution scenario – impact on manufacturing, UK, 2007-2020

Indicator	2013Q4	2015Q4	2020Q4
Output (overall) £bn	-5.8	-6.9	-10.7
Jobs (overall, '000s)	-298.6	-356.2	-543.0
Output (manufacturing) £bn	-1.0	-1.3	-2.0
Jobs (manufacturing, '000s)	-41.8	-49.3	-74.2

Source: SQW

6.22 That is, of the approximately £10.7bn of expected quarterly growth economic output (by 2020Q4) dependent on the availability of AR financing, £2.0bn (19%) is located in the manufacturing sector. Similarly, of the 543,000 additional jobs that are dependent on AR financing, nearly 74,000 are found in the manufacturing sector.

Growth scenario

6.23 Having considered the current and expected future contribution of the existing levels of AR financing, the next task is to develop a future scenario that examines what the future might look like if more companies in the UK were aware of and able to take advantage of the business benefits that AR financing provides. The results are set out below.

Table 6-5: Growth Scenario: Economic Output and Employment, UK, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
Output £bn	270.1	260.0	283.7	301.0	341.1
Output Index	100.0	96.3	105.0	111.5	126.3
Jobs ('000s)	26,990	25,867	26,491	27,279	28,312
Jobs Index	100.0	95.8	98.2	101.1	104.9

Source: SQW

6.24 The table below summarises the difference between the growth potential scenario and the reference case, focusing on the differences in the indexed results of the two scenarios.

Table 6-6: Growth scenario: Compared to Reference Case, UK, 2007-2020

Indicator	2007Q4	2010Q4	2013Q4	2015Q4	2020Q4
ΔOutput Index	0.00	0.08	0.42	0.83	2.59
ΔJob Index	0.00	0.01	0.15	0.34	1.15

Source: SQW

6.25 Hence, the UK economy is expected to grow by around 24% over the 2007-2020 period, but we estimate that if the potential of AR financing was exploited in full then the extent of overall growth could be considerably greater. We estimate this additional growth potential to be around an extra £7.0bn per quarter, which would be an additional uplift of around 2.6% in economic output over the 2020 level expected under the reference case. This uplift in economic output performance is equivalent to an additional 0.16% per year in average annual growth rate over the 2007-2020 period.

6.26 For employment, under the reference case, the UK economy is expected to add around 1 million jobs over the 2007-2020 period, but with AR financing used to its full potential we estimate that there could be an additional 311,000 jobs in the UK by 2020 compared to the expected situation under the reference case.

6.27 We have also examined the situation under the full potential scenario for manufacturing.

Table 6-7: Growth scenario – impacts on manufacturing, UK, 2007-2020

Indicator	2013Q4	2015Q4	2020Q4
Output (overall) £bn	1.2	2.3	7.0
Output (manufacturing) £bn	0.5	1.0	3.1
Jobs (overall, '000s)	40.2	92.1	311.4
Jobs (manufacturing, '000s)	11.5	24.5	72.9

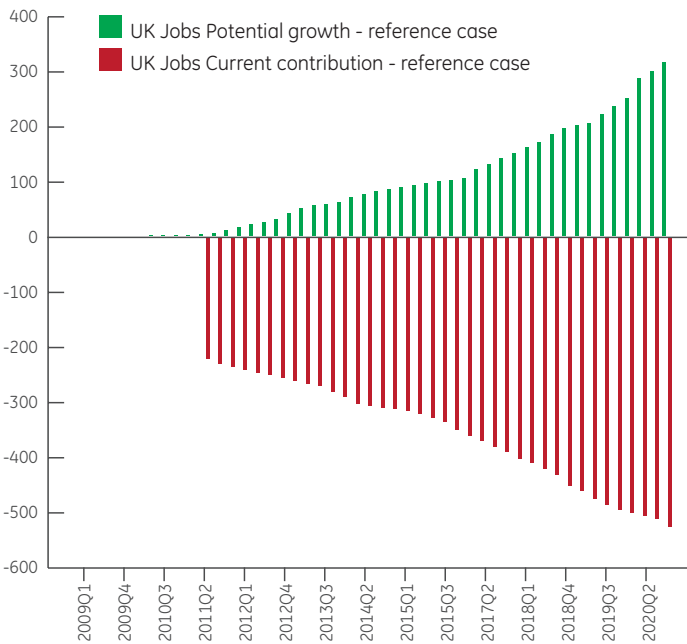
Source: SQW

6.28 Thus, of the £7.0bn of additional quarterly economic output that could be available by 2020 if AR financing was used by UK businesses to its full potential, £3.1bn (44%) is located in the manufacturing sector. Similarly, of the 311,000 additional jobs that stand to be delivered if AR financing was used to its full potential, 73,000 (23%) are found in the manufacturing sector.

Summary of Potential Combined Impacts

6.29 The combined impact of the current contribution and accelerated growth scenarios can be considered as the total potential added value of AR finance to the UK economy. The chart below shows this incremental additional value – in terms of economic output – over the 2011-2020 period. The total value that stands to be generated by 2020 is about £17.7bn per quarter, consisting of around £10.7bn of underlying value and £7.0bn of new additional growth potential.

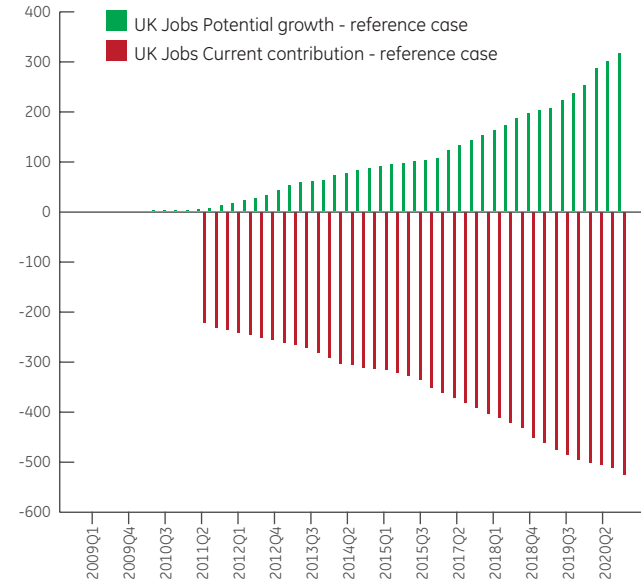
Figure 6-3: Combined impact of the Growth and Current contributions: Output £bn



Source: SQW

6.30 The next chart shows the same effect, but this time for employment. The chart shows that by 2020, 854,000 additional jobs stand to be gained in the UK, consisting of around 543,000 jobs supported under the current contribution case and 311,000 additional jobs that could be gained through accelerated growth potential.

Figure 6-4: Combined impact of the Growth and Underlying Contributions: Jobs ('000s)



Source: SQW

Elizabeth Shaw Ltd.

With a heritage dating back to the 19th Century, Elizabeth Shaw is one of the oldest British Confectionery Companies. Headquartered in Bristol, the company employs 13 staff and has a turn over of around £10m. Its iconic branded products, such as Mint Crisps and Famous Names Liqueurs are available in leading supermarkets in the UK and overseas.

The seasonal nature of product demand poses challenges for working capital at Elizabeth Shaw. During the Christmas period, products fly off the shelves at peak volume. Yet with plump inventories ready to meet demand and payment for shipped goods yet to be received from retailers, the availability of cash needed to keep the business running at maximum pace is a challenge. The problem is exacerbated by the longer payment terms that the major grocery retailers operate to, compared with the relatively short terms that smaller companies, such as Elizabeth Shaw, are able to negotiate with their suppliers.

In these circumstances, invoice discounting has proven to be essential to enable the company to continue trading smoothly. Elizabeth Shaw utilises up to around £3M of funding through its invoice discounting facility, mainly to pay suppliers in the run up to Christmas. The facility is then paid down as customers begin to pay for the stock they have taken in over the seasonal period.

David Boulton, Financial Controller at Elizabeth Shaw Ltd says: *"Invoice Financing has provided a flexible solution to deal with the natural and unavoidable sales cycle. It has provided quick access to finance, enabling us to continue benefiting from higher consumer and retail demand over the festive season, and helping us to maximise our potential for growth in the longer term."*

Since implementing invoice discounting in 2000 the company has been able to fund its working capital needs which, at peak, can be 10 times as high as the low periods of the year. Being able to do this with a single, flexible source of funds, arranged annually in advance and without the need for an overdraft or other conventional funding is also an advantage.

7: Conclusions

Current Usage of Accounts Receivables

- 7.1 Over the long-term, SMEs have tended to be constrained by insufficient access to working capital. The onset of the most recent credit crunch and the recession that followed saw a deep exacerbation of this trend. Factors that contribute to the financing gap for SMEs include a lack of appropriate financing mechanisms, regulatory rigidities, or gaps in the legal framework. This puts SMEs at a disadvantage relative to more established firms when competing for credit from banks and financial institutions.
- 7.2 SMEs have traditionally relied on bank lending in order to secure finance for cash flow and to fund growth. However, banks have been increasingly reluctant to loan to businesses. For example, a recent Bank of England survey found that the stock of lending by all UK resident banks and building societies to businesses contracted by around £5 billion in the three months to November 2010⁴⁴. The described advantages offered through the use of accounts receivable financing has therefore made them more attractive to businesses.
- 7.3 A similar picture has emerged in other European markets, with SMEs again increasingly turning to more AR orientated financing methods. The European Central Bank conducted a series of surveys on the access to finance of SMEs. It found that between the first financial half of 2009 and the second financial half of 2010, the proportion of respondents stating that they had accessed external financing over the preceding six months through 'leasing, hire-purchase and factoring' had increased from 27 per cent to 35 per cent⁴⁵.
- 7.4 Although AR financing has become increasingly popular, in general it has not been a widely used form of financing compared to instruments. A recent survey suggested that only 19 per cent of European SMEs were using AR financing such as factoring, considerably lower than the 51 per cent for leasing/renting and 50 per cent for overdrafts.⁴⁶
- 7.5 Evidence from the four European countries considered in this report, however, suggests that businesses – and in particular SMEs – are increasingly becoming aware of the advantages of Accounts Receivable financial products. AR financing offers a number of distinct advantages to businesses:
- **provision of very short-term funding** – factoring allows for very short-term financing without businesses having to provide supplementary guarantees.
 - **improvement of cash flow** – the period for obtaining cash through AR financing is shorter than through credit
 - **flexibility over use of finance** – factoring allows for funds to be used to meet whatever the immediate needs of the business are

- **an easier application process** – the number of documents required during the AR financing process is usually considerably less than for regular bank credit.
- **protection against non-payment of invoices** – a particular benefit of factoring alone is that the risk of non-payment is entirely transferred to the factor, leaving the debtor free to concentrate efforts on sales and production.

Current Economic Contribution of Accounts Receivables

- 7.6 Economic modelling undertaken as part of this research has highlighted the current contribution of AR instruments to the four European economies considered here. Two of the national factoring associations consulted as part of this study estimate that AR finance supports, respectively, 5% (Germany) and 8% (Italy) of GDP in their respective countries.
- 7.7 The assessment undertaken in this report has also considered the scale of the current value of the economic activity in the four countries that is underpinned by the current levels of provision of AR finance. We estimate that in the event of an immediate withdrawal of AR financial products, the negative economic impact on the countries in output terms would be as follows:
- France: 3.9B€ in 2011Q4
 - Germany: 3.1B€ in 2011Q4
 - Italy: 3.8B€ in 2011Q4
 - United Kingdom: £4.9bn in 2011Q4
- 7.8 We have also considered the proportion of expected future economic growth over the 2007 to 2020 period in each of the countries that is dependent on continued availability of current levels of AR financing provision to businesses. The proportions – and values – of expected future economic output growth that is expected to be contributed by AR finance are as follows:

Table 7-1: Net Additional Contribution of AR Finance to Quarterly Economic Output, 2007-2020

Country	2013Q4	2015Q4	2020Q4
France B€	5.3	7.4	15.5
France %	1.3%	1.8%	3.8%
Germany B€	5.0	7.6	18.2
Germany %	0.9%	1.4%	3.4%
Italy B€	4.8	6.2	11.9
Italy B%	1.5%	2.0%	3.8%
UK £bn	5.7	6.8	10.7
UK %	2.1%	2.5%	3.9%

Source: SQW

⁴⁴ Bank of England [2011], Trends in Lending: January 2011, London, p. 4

⁴⁵ European Central Bank, [2011] Survey on the Access to Finance of SMEs in the Euro Area: September 2010 to February 2011, p.3. The published data does not isolate factoring and simply considers it along side leasing and hire-purchase.

⁴⁶ Taken from OECD, The SME Financing Gap (Vol. II), p. 54

7.9 Thus, by 2020, were it not for the availability of AR financing:

- the economy of France would be 15.5 B€ smaller per quarter (3.8%) than otherwise expected
- the German economy would be 18.2 B€ smaller per quarter (3.4%) than otherwise expected
- the Italian economy would be 11.9 B€ smaller per quarter (3.8%) than otherwise expected
- the UK economy would be £10.7bn smaller per quarter (3.9%) than otherwise expected.

7.10 In terms of the levels of employment in the four countries that are currently underpinned by the existing availability of AR financial products, we estimate that the following numbers of jobs would be lost more or less immediately (ie during or shortly after 2011Q4) if AR finance were no longer available:

- France: 112,000
- Germany: 108,000
- Italy: 123,000
- United Kingdom: 258,000.

7.11 We have also considered the extent to which expected future job growth is dependent on AR financial products in each country. The key conclusions here are, that by 2020, the following numbers of jobs are dependent on the continued availability of AR financing:

- France: 331,000 jobs
- Germany: 322,000 jobs
- Italy: 461,000 jobs
- United Kingdom: 543,000 jobs.

Potential Future Contribution of Accounts Receivables

7.12 In addition, we have considered the potential additional value that AR financing could provide if business usage was increased significantly and nearer to the levels that the national factoring associations consider could be achieved in the respective countries.

7.13 The model developed by SQW considers the potential uplift to national economic performance over the period to 2020 in each respective country. The analysis focused on both economic output and employment. Starting with employment, the table below sets out the potential future increases that could be achieved (compared to a reference case) by 2020 in each country.

Table 7-2: Potential Future Additional Contribution of AR Finance to Economic Output, 2007-2020

Country	2010Q4	2013Q4	2015Q4	2020Q4
France B€	0.5	2.3	4.5	13.4
France %	0.1%	0.6%	1.1%	3.3%
Germany B€	0.6	3.2	6.1	18.6
Germany %	0.1%	0.6%	1.1%	3.4%
Italy B€	0.4	2.1	4.1	12.2
Italy B%	0.1%	0.7%	1.3%	3.9%
UK £bn	0.2	1.2	2.3	7.0
UK %	0.1%	0.4%	0.8%	2.6%

7.14 That is, by 2020, with significant growth in the provision and usage of AR financing:

- the economy of France could be 13.5 B€ larger per quarter (3.3%) than otherwise expected
- the German economy could be 18.6 B€ larger per quarter (3.4%) than otherwise expected
- the Italian economy could be 12.2 B€ larger per quarter (3.96%) than otherwise expected
- the UK economy could be £7.0bn larger per quarter (2.6%) than otherwise expected.

7.15 We have also assessed the extent to which future job growth could be enhanced were AR financial products more fully utilised in each country. The key conclusions here are, that by 2020, the following numbers of additional jobs – above and beyond what is expected to be achieved under the reference case – if AR financing was more fully utilised, could be:

- France: 170,000 jobs
- Germany: 222,000 jobs
- Italy: 234,000 jobs
- United Kingdom: 311,000 jobs.

7.16 Having quantified the potential impacts of the growth scenario on the European economies, the final point is to assess what needs to be done to actualise the considerable economic gains that stand to be realised.

7.17 The assumptions regarding future growth rates that underpin the growth scenario focus in the main on several (but not all) of the identified barriers to greater usage of AR instruments that were considered in Chapter 2 of this report. In particular, the growth scenario assumes (a) the development of greater levels awareness among SME business leaders of the financial benefits that stand to be gained from greater usage of AR instruments, and (b) the addressing of lingering negative perceptions of AR financial products among (some) potential users.

Annex A:

Sectors Included in the Model

A.1 The full list of sectors included in the model is provided below.

Table A-1: Sectors included in the model

1	Agriculture, forestry & fishing
2	Real estate, renting & business services
3	Construction
4	Communication services
5	Wholesale & retail
6	Extraction
7	Financial services
8	Government & community services
9	Transport services
10	Electricity, gas & water
11	Manufacturing
12	Basic metals
13	Chemicals & man-made fibres
14	Computers & office equipment
15	Electrical engineering
16	Food, beverages & tobacco
17	Coke,petroleum & nuclear fuel
18	Mechanical engineering
19	Metal products n.e.c,
20	Non-metallic minerals
21	Motor vehicles & parts
22	Other transport equipment
23	Paper, printing & publishing
24	Precision, medical & optical equipment
25	Rubber & plastics
26	Textiles, leather & clothing
27	Wood & wood products
28	Other manufacturing

Annex B:

Stakeholder Organisations

B.1 The following is a list of organisations consulted for this study.

Table B-1: Organisations consulted for this study

Organisation	Country
ACFCI/CCI Nancy	France
CGPME - Confédération Générale des Petites et Moyennes Entreprises	France
Ministère de l'Economie, de l'Industrie et de l'Emploi	France
OSEO Innovation	France
Assifact	Italy
Banca d'Italia	Italy
CNDCEC	Italy
Associazione Bancaria Italiana	Italy
CONFINDUSTRIA	Italy
Ministero dello Sviluppo Economico-MISE	Italy
Bund Deutscher Industrie	Germany
DFV - Deutsche Factoring Verband	Germany
Institut für Mittelstandsforschung	Germany
ACCA - the Association of Chartered Certified Accountants	UK
BIS - the Department for Business, Innovation and Skills	UK
CBI - the Confederation of British Industry	UK
The Bank of England	UK

Annex C:

Detailed Results of the Model

C.1 The tables below set out, in turn, detailed modelled results for output and employment for each of the four EMEA countries in turn.

Table C-1: France

Output per Qtr , € billions	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, output	8.8	8.8	8.8	8.8	8.9	8.9	8.9	8.9	8.9	9.0	9.0
Real estate, renting & business services, output	126.6	128.7	131.7	135.2	139.0	142.9	146.5	150.0	153.3	156.4	159.1
Construction, output	21.0	21.3	21.9	22.4	22.9	23.2	23.5	23.9	24.2	24.5	24.8
Communication services, output	6.0	6.1	6.3	6.4	6.5	6.7	6.8	7.0	7.1	7.3	7.4
Wholesale & retail, output	41.2	41.9	42.6	43.2	43.9	44.5	45.1	45.8	46.5	47.1	47.8
Extraction, output	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Financial services, output	22.1	22.6	23.2	23.7	24.2	24.7	25.2	25.8	26.3	26.9	27.5
Manufacturing, output	47.2	48.7	50.1	51.4	52.3	53.0	53.7	54.5	55.2	56.0	56.8
Government & community services, output	112.1	113.9	115.7	117.6	119.5	121.4	123.3	125.3	127.3	129.4	131.5
Transport services, output	11.8	12.0	12.3	12.5	12.8	13.0	13.3	13.6	13.8	14.1	14.4
Electricity, gas & water, output	6.5	6.6	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1
Total	403.7	411.1	419.7	428.5	437.1	445.5	453.8	462.0	470.1	478.1	485.8

Employment, '000s	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, Employment	323	322	321	321	320	319	319	318	317	317	316
Real estate, renting & business services, Employment	2,644	2,665	2,722	2,788	2,856	2,926	2,993	3,045	3,082	3,121	3,141
Construction, Employment	1,428	1,386	1,393	1,407	1,427	1,436	1,445	1,453	1,462	1,469	1,475
Communication services, Employment	458	462	466	467	468	470	471	472	474	475	476
Wholesale & retail, Employment	3,531	3,557	3,582	3,592	3,601	3,611	3,620	3,630	3,640	3,649	3,659
Extraction, Employment	28	27	26	24	23	22	21	21	20	19	18
Financial services, Employment	837	841	845	849	852	856	860	864	868	872	876
Manufacturing, Employment	2,760	2,742	2,721	2,704	2,682	2,657	2,630	2,604	2,578	2,553	2,527
Government & community services, Employment	9,738	9,827	9,859	9,905	9,957	10,020	10,072	10,120	10,170	10,214	10,264
Transport services, Employment	1,319	1,332	1,339	1,342	1,346	1,349	1,352	1,356	1,359	1,363	1,366
Electricity, gas & water, Employment	209	209	209	208	208	208	208	207	207	207	207
Total	23,277	23,370	23,483	23,606	23,741	23,874	23,991	24,090	24,177	24,258	24,325

Table C-2: Germany

Output per Qtr , € billions	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, Output	4.3	4.2	4.2	4.2	4.2	4.3	4.3	4.4	4.4	4.5	4.5
Real estate, renting & business services, Output	135.5	135.0	136.5	140.3	142.6	145.6	148.6	150.6	152.5	154.4	156.9
Construction, Output	20.3	20.6	21.0	21.4	21.8	22.2	22.6	22.9	23.2	23.5	23.8
Communication services, Output	10.6	10.9	11.2	11.5	11.9	12.3	12.6	13.1	13.5	13.9	14.4
Wholesale & retail, Output	61.4	61.8	62.4	63.5	64.7	66.0	67.2	68.3	69.4	70.4	71.3
Extraction, Output	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
Financial services, Output	28.0	28.2	28.4	29.1	30.0	30.8	31.6	32.4	33.1	33.7	34.2
Manufacturing, Output	125.4	130.4	136.8	141.0	144.9	148.0	150.6	153.2	155.8	158.4	161.0
Government & community services, Output	126.4	127.2	126.9	127.6	129.2	131.0	132.7	134.5	136.4	138.4	140.0
Transport services, Output	19.8	20.2	20.7	21.1	21.5	21.8	22.2	22.5	22.9	23.3	23.6
Electricity, gas & water, Output	11.1	11.1	10.9	10.8	10.9	10.9	10.9	10.9	10.9	11.0	11.0
Total	543.5	550.3	559.8	571.1	582.4	593.5	604.0	613.4	622.7	632.0	641.4

Employment, '000s	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, Employment	438	429	420	412	404	396	388	380	373	365	358
Real estate, renting & business services, Employment	5,034	5,051	5,066	5,071	5,072	5,073	5,074	5,075	5,076	5,077	5,078
Construction, Employment	1,655	1,686	1,715	1,743	1,767	1,777	1,788	1,798	1,809	1,819	1,829
Communication services, Employment	472	468	464	461	457	452	446	441	436	431	426
Wholesale & retail, Employment	6,654	6,674	6,720	6,734	6,739	6,744	6,749	6,754	6,759	6,764	6,769
Extraction, Employment	56	52	49	45	42	39	36	33	31	29	27
Financial services, Employment	1,012	1,019	1,023	1,027	1,031	1,036	1,040	1,044	1,048	1,052	1,057
Manufacturing, Employment	4,890	4,920	4,931	4,911	4,896	4,868	4,836	4,801	4,768	4,735	4,703
Government & community services, Employment	14,100	14,156	14,153	14,243	14,300	14,344	14,343	14,343	14,313	14,215	14,100
Transport services, Employment	1,537	1,541	1,546	1,550	1,555	1,558	1,561	1,564	1,567	1,570	1,573
Electricity, gas & water, Employment	263	256	249	243	236	230	223	217	211	206	200
Total	36,112	36,253	36,337	36,440	36,498	36,516	36,484	36,451	36,390	36,263	36,119

Table C-3: Italy

Italy, Output per Qtr, € billions	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, Output	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6
Real estate, renting & business services, Output	61.9	63.6	63.7	64.4	65.3	66.8	67.9	68.8	70.0	70.9	71.9
Construction, Output	17.6	17.9	18.3	18.8	19.1	19.4	19.6	19.9	20.1	20.3	20.5
Communication services, Output	6.6	6.7	6.8	7.0	7.2	7.5	7.8	8.0	8.2	8.5	8.7
Wholesale & retail, Output	47.4	47.3	47.0	46.8	47.3	47.9	48.4	48.7	48.9	49.0	49.0
Extraction, Output	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7
Financial services, Output	19.3	19.4	19.5	19.7	20.0	20.5	21.0	21.4	21.7	22.2	22.5
Manufacturing, Output	59.6	61.2	63.6	65.6	66.9	68.0	69.0	69.6	70.3	71.0	71.6
Government & community services, Output	61.6	61.0	60.7	60.7	61.1	61.6	62.3	63.1	63.7	64.2	64.7
Transport services, Output	14.8	14.9	15.3	15.6	16.2	16.7	17.3	17.9	18.4	19.0	19.5
Electricity, gas & water, Output	3.6	3.6	3.6	3.7	3.7	3.8	3.9	3.9	4.0	4.0	4.1
Total	300.5	303.5	306.6	310.4	315.1	320.3	325.3	329.5	333.5	337.4	340.9

Employment, '000s	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, Employment	494	484	474	464	455	445	436	427	418	410	401
Real estate, renting & business services, Employment	2,314	2,351	2,389	2,456	2,526	2,597	2,671	2,735	2,802	2,858	2,910
Construction, Employment	1,177	1,177	1,184	1,195	1,207	1,214	1,221	1,225	1,228	1,231	1,234
Communication services, Employment	182	180	177	175	172	170	167	165	162	160	158
Wholesale & retail, Employment	2,714	2,703	2,713	2,720	2,727	2,732	2,736	2,740	2,744	2,749	2,753
Extraction, Employment	36	35	35	35	35	34	34	34	33	33	33
Financial services, Employment	500	501	504	509	513	517	522	526	531	535	540
Manufacturing, Employment	3,353	3,333	3,315	3,293	3,266	3,238	3,209	3,180	3,151	3,123	3,095
Government & community services, Employment	5,015	5,032	5,074	5,090	5,081	5,073	5,048	5,022	4,977	4,942	4,911
Transport services, Employment	1,061	1,051	1,051	1,051	1,051	1,050	1,050	1,049	1,049	1,048	1,047
Electricity, gas & water, Employment	122	119	116	114	111	108	106	103	101	99	96
Total	16,967	16,966	17,034	17,102	17,143	17,179	17,198	17,206	17,197	17,187	17,177

Table C-4: UK

Output per Qtr, £ billions	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, Employment	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Real estate, renting & business services, Employment	65.2	68.3	72.1	76.0	80.2	84.3	88.8	91.6	65.2	98.8	102.3
Construction, Employment	15.6	15.6	16.0	16.6	17.1	17.5	17.8	18.2	18.5	18.8	19.2
Communication services, Employment	7.6	7.9	8.3	8.7	9.0	9.3	9.6	9.9	10.2	10.5	10.9
Wholesale & retail, Employment	37.9	39.7	40.4	41.9	43.2	44.4	45.5	46.4	47.4	48.4	49.4
Extraction, Employment	4.3	4.3	4.2	4.0	3.7	3.5	3.3	3.2	3.0	2.8	2.7
Financial services, Employment	19.4	20.2	21.1	22.2	23.3	24.4	25.4	26.4	27.3	28.2	29.0
Manufacturing, Employment	31.3	32.2	33.1	34.0	34.5	35.0	35.4	35.9	36.0	36.3	36.6
Government & community services, Employment	62.4	62.6	62.2	61.9	62.1	62.3	62.6	63.0	63.4	63.8	64.2
Transport services, Employment	10.8	11.2	11.6	12.0	12.3	12.7	13.0	13.3	13.6	13.8	14.1
Electricity, gas & water, Employment	3.8	3.7	3.7	3.7	3.8	3.8	3.9	3.9	3.9	4.0	4.0
Total	259.8	266.6	274.3	282.5	290.8	298.8	306.2	313.0	320.0	327.0	334.1

Employment, '000s	2010Q4	2011Q4	2012Q4	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Agriculture, forestry & fishing, Employment	228	225	221	217	213	208	204	200	196	192	189
Real estate, renting & business services, Employment	4,194	4,291	4,475	4,739	4,999	5,252	5,430	5,596	5,668	5,725	5,788
Construction, Employment	1,204	1,204	1,217	1,245	1,273	1,294	1,314	1,334	1,346	1,356	1,366
Communication services, Employment	940	949	961	976	994	1,008	1,021	1,030	1,036	1,042	1,046
Wholesale & retail, Employment	6,067	6,106	6,179	6,298	6,397	6,487	6,567	6,619	6,656	6,683	6,700
Extraction, Employment	49	48	47	46	44	43	42	41	40	39	37
Financial services, Employment	1,013	1,020	1,032	1,051	1,060	1,063	1,065	1,066	1,067	1,068	1,069
Manufacturing, Employment	2,315	2,286	2,265	2,240	2,204	2,161	2,112	2,064	2,017	1,971	1,926
Government & community services, Employment	8,449	8,370	8,284	8,196	8,173	8,181	8,211	8,238	8,278	8,323	8,364
Transport services, Employment	1,174	1,184	1,200	1,220	1,248	1,272	1,289	1,302	1,306	1,308	1,310
Electricity, gas & water, Employment	231	228	225	223	220	217	215	212	210	207	205
Total	25,864	25,911	26,105	26,451	26,825	27,187	27,470	27,703	27,820	27,915	28,001