The profitability of Wonga's UK payday business in the context of the CC's market investigation

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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

1.1.1 AlixPartners UK LLP ('AlixPartners') has been asked by Wonga Group ('Wonga') to undertake an independent assessment of the profitability of Wonga's UK short-term credit or 'payday lending' business in the context of the Competition Commission's ('CC') market investigation into payday lending, and in response to the CC's working paper on profitability ('WP'). In particular, AlixPartners has been asked to consider:

(a) Wonga's UK payday business's economic profitability over the period since it was incorporated and how this differs from its accounting profitability;

(b) how Wonga's profitability is expected to evolve in relation to its UK payday business;

(c) the profitability of payday lending at a sectoral level; and

(d) the appropriate framework for the interpretation of profitability results.

1.1.2 AlixPartners has adopted an approach to assessing economic profitability which is likely to be of greatest relevance to the CC's inquiry. This approach, which attempts to capture all relevant economic costs and intangible assets, may differ in certain respects from the way in which Wonga performs financial analysis for its commercial purposes, but best informs, in AlixPartners' view, the competition-related issues relevant to the CC's assessment.

1.2 FEATURES OF THE MARKET AND INTERPRETATION ISSUES

1.2.1 In determining this approach to estimating the profitability of Wonga and the wider payday lending industry, AlixPartners has considered various features of the sector. These are summarised below and set out in more detail in Section 3.

Ø **The life-cycle of the business** - Wonga's business was a start-up, having only been established in 2006, and has been in a rapid growth phase in recent years. Estimates of profitability over a snapshot period of time are unlikely to be a reliable indicator of profits likely to be earned in the future, or indeed the steady-state level of profits that the firm would expect to generate once the industry 'matures'.

- **Profitability in the context of innovation markets** - Wonga has developed a business model which is successfully challenging established lending models, and has continued to innovate in response to competition (as set out in Wonga's response to the WP). Such innovations required investment and risk-taking by Wonga, for which a fair return is expected. The temporary competitive and cost advantage resulting from such innovation may also allow Wonga to earn a return over the cost of capital for a period of time.

- **Impact of low capital intensity** - The short-term credit sector operates with lower capital intensity compared with some other consumer finance sectors (or indeed other service sectors), so that it is more difficult to interpret performance using measures such as return on capital employed ('ROCE'). In this context, small changes in profits or measured capital employed will have a major impact on ROCE.

- **Survivorship bias** - Many aspects of Wonga's business model were novel or unproven at the outset and the performance of the business could have turned out very differently. As such, the CC should be cautious in interpreting the results of an *ex post* profitability analysis in this sector. Investors would have factored such risks of failure into their required returns, and in the event of success, the rewards would clearly need to be sufficient to compensate for the prospect of such losses. This implies that it is critical to take account of the risk of 'survivorship bias' in any measured results. AlixPartners understands that the early stage risks to Wonga's business were reflected in the challenges the business owners faced in obtaining initial financing from conventional sources and their reliance instead on relatively expensive venture capital.

- **Low barriers to entry** - The CC uses profitability analysis as an indicator of entry barriers or other limitations in the competitive process. However, unlike many other sectors assessed by the CC, the payday sector has recently experienced rapid growth and significant levels of entry and exit, and has a large number of market participants. This suggests that even if returns above the cost of capital were found, this would not be as a result of entry barriers. Moreover, there are a large number of significant potential entrants (including private equity companies, technology companies with strong brands, retailers etc.) that could easily depress future returns for current lenders. Providers in related sectors could expand lending or provide substitutable products that may also affect market demand.

1.3 APPROACH TO MEASUREMENT OF PROFITABILITY

1.3.1 Given these features of the market, AlixPartners' approach to measuring profitability is as follows:

(a) **Measure of profitability –** a range of alternative capital-based measures of profitability were considered (including economic measures such as the truncated internal rate of return (IRR), as well as accounting measures such as return on equity (ROE)). However, based on the limitations of each of these approaches, ROCE adjusted for intangible assets was chosen instead. AlixPartners notes that this is the same measure adopted by the CC in the *Home Credit* and most of the CC's other market investigations, and is one of the two measures considered in the WP (with the other being the ROE). There would also be merit in considering alternative measures given the low capital intensity of the payday loans sector, but this is outside the scope of this report.

(b) **Asset valuation –** the analysis in this report adheres to the CC's guidelines on determining asset values according to the 'deprival value' or 'value to the owner principle'. AlixPartners recognises that asset valuation in accordance with these principles is inherently uncertain, and has therefore considered a range of measures as follows[1]:

(i) ***Modern Equivalent Asset Value (also referred to here as 'MEA 1')*** – the value of Wonga's intangible assets not already recognised on the balance sheet is estimated by identifying the costs associated with developing these assets (including a trained workforce, customer acquisition costs and knowledge of customer creditworthiness), and then adding these costs to the accounting value of capital employed. AlixPartners accepts that the MEA 1 'bottom-up' approach relies upon a number of key assumptions (and in particular relating to the proportion of expenditures to be capitalised and over how many years). Intangibles are therefore valued under two additional ('top-down') approaches; namely, based on market-to-book ratios of publicly listed payday lenders (MEA 2, see below) and the CC's approach adopted in the *Home Credit* inquiry (MEA 3, see below). AlixPartners notes that the bottom-up approach lies within the range for the top-down approaches.

[1] Approaches are referred to as 'MEA' since they are a best estimate of the costs a new entrant would incur. Wonga's position as an actual entrant means that estimates based on costs incurred by Wonga are arguably the best available estimates.

(ii) ***Market to book ratios ('MEA 2')*** – the second approach uplifts Wonga's accounting value of capital employed for the market-to-book ratio applying to publicly listed payday lending companies in the US and elsewhere. The problem typically identified with this approach (that it is 'circular' because any 'excess profits' among companies with substantial market power may be capitalised in the market's valuation of the assets) is unlikely to apply in this case because the benchmarks used are primarily taken from what AlixPartners understands are the highly competitive short-term credit markets in the US and Australia. Therefore, market-to-book ratios can be a useful alternative to the MEA 1 approach in this instance.

(iii) ***CC maximum value approach in the Home Credit inquiry ('MEA 3')*** – thirdly, Wonga's accounting capital employed is uplifted based on the approach adopted by the CC in the *Home Credit* inquiry. AlixPartners has identified sufficient similarities between payday lending and home credit lending (such as lending of relatively small amounts for relatively short periods of time) that the application of this approach is considered to be appropriate.

Given the discussion above, AlixPartners considers the MEA 1 approach to be a key metric in the assessment of Wonga's profitability, but results under the other approaches are also considered to provide useful insights and are reported in Section 4.

AlixPartners also applied the same uplifts to industry accounting data to derive an estimate of industry profitability.

(c) **Time period –** profitability is estimated over different time periods of relevance to the investigation. Historical information is presented for the period 2007-13 (i.e. the start of trading by Wonga until the most recent year for which full year results are available), and the period 2008-12 (reflecting the financial template request by the CC). Forecasts are presented for 2014.

(d) **Other adjustments –** Based on management guidance, salary costs for 2007 and 2008 are **[CONFIDENTIAL]** to capture remuneration that was partially made through profits (for instance, through employee share schemes) rather than salaries.

(e) **Aggregation –** the following levels of aggregation were considered, noting that the precise market definition is outside the scope of this report.

(i) *Wonga's UK payday-lending business ('UK Little Loans')*. This is the entity that Wonga reported data for as part of its response to question 1 of the CC's Financial Questionnaire.

(ii) *UK payday lending sector*. The profitability of the payday lending sector (or at least the companies that comprise a large part of the industry) is more relevant to an assessment of how competition is working in a sector rather than the profitability of any individual company. AlixPartners has therefore estimated the accounting and economic profitability of the sector informed by its analysis of Wonga's profitability.

1.4 RESULTS AND KEY FINDINGS

(i) Wonga's economic profitability is significantly lower than its accounting profitability

1.4.1 Wonga's accounting ROCE is as follows over the period 2007-13, with **[CONFIDENTIAL]**

Table 1.1: Accounting return on capital employed, Wonga, 2007-13

%	2007	2008	2009	2010	2011	2012	2013
Average of year	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

Source: Wonga financial information, AlixPartners analysis

1.4.2 Table 1.2 below shows that with economic adjustments applied, Wonga's ROCE is generally below the accounting ROCE. However, the low capital intensity of the business (even with intangibles included) means that historical returns on capital appear to be **[CONFIDENTIAL]**, particularly for the period 2010 to 2012 (**[CONFIDENTIAL]**). The high velocity nature of Wonga's loans (leading to capital being recycled frequently throughout the year) means that the average level of capital held during the year (taken as an average of the beginning and year-end balances) does not adequately capture the potential risk exposure of the firm to losses on overall lending. A relatively small change in default rate would lead to a material change in returns.

Table 1.2: Economic return on capital employed, Wonga, 2007-13

[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]

(ii) Profitability is declining and is forecast to fall further

1.4.3 The CC's focus on historical analysis for the period to 2012 does not allow it to account for the slowdown in growth already apparent in 2013, the significance of recent changes in competitive and regulatory conditions, and the continued effects of such changes anticipated to take place in the near future. Wonga has provided AlixPartners with financial information forecasts for 2014, which AlixPartners understands are the result of a detailed planning process involving all relevant aspects of the business and which has received Board approval. These show**[CONFIDENTIAL]**, which AlixPartners understands reflects a number of key trends, including increased focus on price competition, a move to **[CONFIDENTIAL]** and the effect of regulatory measures introduced by the FCA.

1.4.4 As a result, Wonga's economic return on capital employed shows a **[CONFIDENTIAL]**, as shown in Table 1.3 below.

[CONFIDENTIAL]

[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]

(iii) Industry profitability is substantially below that of Wonga

1.4.5 AlixPartners' estimates of accounting and economic ROCE at the industry level (weighted by capital employed) are set out in the tables below, based on an analysis of company accounts for twenty large operators of payday loans in the UK including Wonga. The results are based on financial information in UK statutory accounts, which typically do not show segmented results for payday loans. This evidence of accounting and economic returns across the industry, as shown in Table 1.4 below, suggests than on average returns have been lower than those earned by Wonga.

1.4.6 Average ROCE ratios, and trends in average ROCE ratios, fail to capture the dynamics of the market. A total of 11 companies have made losses in at least one year within the period – the range of estimates across the industry is discussed in Section 6.

Table 1.4: Accounting and economic return on capital employed, industry average, 2007 - 2012

%	2007	2008	2009	2010	2011	2012
Accounting return	15.1	19.9	30.2	36.5	37.5	32.9
MEA 1	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
MEA 2	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
MEA 3	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

Source: Various annual reports. Sample firms set out in Appendix 3

(iv) The evidence does not support a view that there has been substantial or persistent excess profits across the sector

1.4.7 The evidence on Wonga's profitability does not support a finding of competition concerns in the payday sector. In particular:

(a) The use of ROCE, even after economic adjustments, is highly problematic given the low and variable nature of the capital base of the sector. Difficulties in interpreting ROCE in the context of the payday lending sector are discussed in more detail in Section 3.

(b) Strong performance in what are still the early years in the business's history is likely to be explained by Wonga's innovative and efficient business model, which has been successful in appealing to customers and attracting demand. There is severe survivorship bias risk when interpreting Wonga's historical performance given the fact that Wonga's business was a start-up, profits have varied significantly across the sector (with several firms having made losses), and the fact that some other operators have left the market.

(c) The industry has evolved rapidly and returns have changed rapidly, with evidence from Wonga's financial results for 2013 (which accompany this report) consistently showing **[CONFIDENTIAL]**

(d) Industry-wide performance appears to demonstrate **[CONFIDENTIAL]** rates of return than for Wonga, consistent with the view that Wonga was a successful first mover in developing an innovative and consumer-friendly business model. This variation in performance is consistent with a competitive sector in which firms must seek to develop attractive products, offer value for money, and ensure they are efficient and rigorous in

their credit assessment if they are to achieve competitive success (and lend responsibly). The dispersion of financial performance is consistent with a market where firms are competing to develop the best business model to serve the customer– those that perform well achieve positive returns and those that do not make losses.

(e) Even for the best performing firms there is evidence of increasingly challenging conditions driven by new product innovation (for example the emergence and take-up of **[CONFIDENTIAL]**); regulatory intervention in the sector (including the FCA's proposed changes to the use of continuous payment authorities ('CPA')); and increasing evidence of price competition. These pressures are shown in Wonga's **[CONFIDENTIAL]**

(f) Small changes in customers' ability to repay loans can have a large impact on profitability. An increase in the principal loss rate from **[CONFIDENTIAL]** reduces Wonga's EBIT **[CONFIDENTIAL]**. This is described in more detail in Section 7.

(g) It is not reasonable to compare outturn or *ex post* returns to the *ex ante* cost of capital in the current context, where the effects of survivor bias and other factors noted above may lead to inappropriate conclusions. Any benchmarking of outturn returns should reflect the performance required by venture capital investors under a successful scenario (i.e. which would need to counteract the significant risk of failure). This issue is detailed in the discussion of interpretation issues in Section 7.

2 INTRODUCTION

2.1 SCOPE OF THIS REPORT

2.1.1 AlixPartners has been asked by Wonga Group ('Wonga') to undertake an independent assessment of the profitability of Wonga's UK short-term credit or 'payday lending' business in the context of the Competition Commission's ('CC') market investigation into payday lending. In particular, AlixPartners has been asked to consider:

(a) the economic profitability of Wonga's UK payday business over the period since it was incorporated, and how this differs from its accounting profitability;

(b) how Wonga's profitability is expected to evolve in relation to its UK payday business;

(c) the profitability of payday lending at a sectoral level; and

(d) the appropriate framework for the interpretation of profitability results.

2.1.2 In light of the focus of the CC on the UK payday lending sector, this analysis is focused on Wonga's UK payday lending business. In some cases this has required estimates of costs incurred at a Group level to be allocated to the UK lending business. This analysis has included a review of: Wonga's accounts; the accounts of rival payday lenders; more detailed information submitted by Wonga to the CC (such as that in monthly management accounts); and the approaches take in previous CC inquiries. Information used in this report is set out in Appendices 1 to 8.

2.1.3 AlixPartners has relied on Wonga for the production of source information relevant to the calculation of profitability. AlixPartners understands that the source information has been derived from management accounts, with certain adjustments and allocations made as necessary to reflect the underlying economics of the UK lending entity. This analysis has been carried out by Wonga in order to assist the CC in its inquiry. The basis of these adjustments has not been audited.

2.1.4 AlixPartners has also held interviews or question and answer sessions with key staff from Wonga's finance team to clarify understanding of certain matters. Throughout the report, references are made to relevant information sources. A large part of this information has already been submitted by Wonga to the CC. Other data has been reproduced in the report and appendices as far as possible.

2.1.5 AlixPartners has adopted an approach to assessing economic profitability in the way that is likely to be of greatest relevance to the CC's inquiry. This approach, which attempts to capture all

relevant economic costs and intangible assets, may differ in certain regards from the way Wonga performs financial analysis for its commercial purposes, but best informs, in AlixPartners' view, the competition-related issues relevant to the CC's assessment.

2.2 STRUCTURE OF THIS REPORT

2.2.1 This report is structured as follows:

(a) Section 3 provides an overview of the relevant features of the payday sector to take into account for the purpose of carrying out a profitability analysis in the context of the CC's market inquiry. It also provides an overview of the approach AlixPartners has taken to the measurement of profitability;

(b) Section 4 provides an analysis of Wonga's UK payday lending profitability for 2014 based on data Wonga has provided to the CC and updated forecasts undertaken by the business;

(c) Section 5 sets out estimates of profitability for the wider payday sector; and

(d) Section 6 provides conclusions and an interpretation of the profitability results.

3 OVERVIEW OF THE APPROACH

3.1 FEATURES OF THE PAYDAY SECTOR AND THEIR RELEVANCE TO ASSESSING PROFITABILITY OF THE SECTOR

3.1.1 Prior to setting out estimates of profitability for Wonga and the sector, AlixPartners considers the key features of the sector and Wonga's payday business that have an important bearing on the measurement and interpretation of profitability in the context of the CC's inquiry.

The life-cycle of Wonga's business

3.1.2 Wonga's business was a start-up having only been established in 2006, and has been in a rapid growth phase in recent years. The very low initial base of activity in 2008, coupled with the rapid growth since then, means that estimates of profitability over the period 2008-12[2] are not a reliable indicator of profits that are likely to be earned in future, nor of the level of profitability that the sector may be expected to earn when it matures to a 'steady-state'.

3.1.3 The relatively recent development of the online payday loans business also leads to a number of specific interpretation challenges. For example:

(a) The level of capital employed has changed rapidly in recent years, making it difficult to compare profits over time.

(b) The conditions experienced by Wonga in the early years of its development are no longer relevant. For example, the sector has become increasingly competitive due to the significant level of entry into the sector, there have been significant changes in the regulatory environment, and the way in which customers engage with the product has also developed over time[3].

3.1.4 Moreover, the impact of growth has consequences for the measurement of economic profitability. For example, when adjustments to reflect the economic capital employed by a business are undertaken for companies in their growth phases, the results of a profitability analysis can be misleading unless the rapid growth is controlled for. In particular, when the company is rapidly growing, the annual costs associated with intangibles included on the adjusted balance sheet will tend to exceed the amortisation charge for these assets until 'steady-state' is reached. This would

[2] 2008 to 2012 is the period over which the CC stipulated that financial information should be provided for its financial template.
[3] In addition, profitability in the this market depends upon a large range of factors (such as the level of acquisition costs for new customers, the profitability of achieving repeat loans and default rates) which have proved changeable as the market has developed and which appear highly uncertain going forward. AlixPartners also understands that Wonga has had to respond to other challenges that have emerged, including **[CONFIDENTIAL]**

imply that during a growth phase the measured economic profits (adjusted after capitalising relevant intangibles) may appear to be higher than the reported accounting profits. An adjustment to the assumed level of amortisation to reflect steady state conditions can however be made to provide a more relevant estimate of underlying profitability. In particular, it is therefore assumed that the amortisation charge is equal to capitalised costs, or, in other words, that the economic adjustments for intangibles do not affect operating profits but rather lead only to a change in the value of capital employed. Treatment of this issue is set out in Section 4.3.

Profitability in the context of innovation markets

3.1.5 Wonga has developed a business model which is successfully challenging established lending models (including those of the much larger banks). It has proven very popular with customers due to the benefits offered by flexible repayments, the online application process and a variety of other features. Wonga has discussed this in its response to the Market Questionnaire (§ 42.2 and 42.3), for example referring to its innovative pricing model (by allowing early repayment at no extra cost), and allowing customers to be in control of the period of borrowing up to a certain limit. Wonga has continued to innovate and has had the successful features of its business 'copied' by other consumer finance firms, including the widely recognised 'slider' on its website.

3.1.6 To the extent that Wonga's historical financial performance appears to have **[CONFIDENTIAL]**, this can be explained by its innovative offering, the risks it took in competing against established banks in the wider consumer market, as well as the efficiency of its operating model which relies on online interaction with customers. Such factors have previously been considered by the CC as possible explanations of why profitability might exceed a competitive benchmark without this implying a lack of competitive pressures going forward[4].

Impact of low capital intensity[5]

3.1.7 The short-term credit sector operates with lower capital intensity compared with some other consumer finance sectors and AlixPartners' analysis indicates that Wonga's capital intensity is

[4] For example, the CC recognises that some firms could make profits above the 'normal' level '*as a result of past innovation, or superior efficiency*'. Source: Competition Commission (2013), '*Guidelines for market investigations: Their role, procedures, assessment and remedies*', p. 28, § 117.
[5] Low capital intensity is related to but may not imply high velocity and vice versa. For example, if payday loan interest rates were the same as is typically the case for personal loans, while velocity in this hypothetical example would remain high capital intensity would not necessarily be low.

[CONFIDENTIAL][6]. It is more difficult in these circumstances to interpret performance using capital-based indicators such as ROCE[7].

3.1.8 One reason for low capital intensity is the high-velocity of credit. Wonga provides short-term loans of relatively small amounts and over short periods of time. Wonga also relies upon its ability to 'revolve' the credit i.e. so-called 'high-velocity' credit. As an example, given the typical duration of payday loans of around or less than one month, a payday lender providing a £100 loan would, over the course of a year, have £1,200 of principal at risk. An annual personal loan or overdraft of £100 would only have this lower amount at risk[8].

3.1.9 Whereas a bank seeks to obtain a return on, say, personal loan lending over the course of the loan or on an annual basis, Wonga recycles the capital and achieves a varying and uncertain level of return on each new loan. This also means that relatively small changes in its earnings before interest and taxes ('EBIT') or cost drivers can have large impacts on reported profitability compared with businesses with lower velocity credit.

3.1.10 A low level of capital due to high velocity credit also implies that economic adjustments to the capital base (such as valuing and including intangible assets in the asset base) may have a more material impact on profitability estimates. As these adjustments are (inevitably) uncertain, this may also imply more caution in interpreting the results of a profitability analysis in this case as compared to the more mature markets the CC typically investigates.

Survivorship bias

3.1.11 Many aspects of Wonga's business model were novel or unproven at the outset and the performance of the business could have turned out very differently. The CC should therefore be more cautious in interpreting the results of a profitability analysis in this sector as compared with the more mature markets it typically investigates. Investors would have factored such risks of failure into their required returns under successful scenarios, and, in the event of success, the rewards would clearly need to be sufficient to compensate for the prospect of such losses. It is therefore critical to take account of the risk of 'survivorship bias' in any measured results.

[6] This is discussed in more detail in Section 6 on the industry's profitability results.
[7] The CC recognised this point in their review of *Classified Directories Advertising Services Inquiry* where one measure of profitability was the return on sales benchmarked against comparable sectors.
[8] The value of £1,200 is relevant if the loans are independent, i.e. loans to each customer do not depend on the performance of prior loans. In the event that capital constraints would limit the ability to issue loans in the event of non-repayment, the total principal at risk may be reduced.

3.1.12 AlixPartners understands that the early stage risks to Wonga's business were demonstrated by the challenges the business owners faced in obtaining initial financing from conventional sources and their reliance instead on relatively expensive venture capital, which reflected, in part, the potential risks inherent in developing a new business model in competition with established banks.

Low barriers to entry

3.1.13 The CC uses profitability analysis as an indicator of entry barriers or other limitations in the competitive process. In particular, the CC typically considers the cost of new entry into the market and models the industry's profitability on this basis. If profits are found to be 'persistently and substantially' above the competitive benchmark when assets are valued on this basis, this may suggest the existence of barriers to entry because, without such barriers, new entry should in theory have occurred to compete away those excess profits[9].

3.1.14 However, unlike many other markets assessed by the CC, payday lending in the UK has a large number of participants with significant evidence of on-going entry and exit. For example, the CC's Entry and Expansion WP presents evidence of significant levels of entry, by both larger and smaller operators, over a period of several years. It shows that a wide range of approaches to entry have been adopted, including privately funded start-ups; acquisition (and expansion of the operations of existing UK operators); international expansion of US-based organisations; and development of branch networks[10]. This implies that even if profits are found to be substantially in excess of the competitive benchmark, this is not as a result of entry barriers.

3.1.15 The success of Wonga's business model as well as those of other leading payday lending companies has reduced the risks facing new entrants by demonstrating the model's viability. For example, Wonga has successfully deployed an online platform for short-term credit products. Moreover, the proven feasibility of the model lowers the cost of finance for other market entrants, since investors would be expected to have lower hurdle rates due to a lower perceived risk.

3.2 SUMMARY OF THE APPROACH TO THE MEASUREMENT OF PROFITABILITY

3.2.1 In light of these features of the sector, AlixPartners' approach to the measurement of profitability is set out below.

[9] The CC has noted '*The ability to earn profits persistently above the competitive level could indicate the presence of entry barriers.* Source: Competition Commission (2013), '*Guidelines for market investigations: Their role, procedures, assessment and remedies*', p. 28, § 119.

[10] *Entry and Expansion working paper*, § 15.

Measurement of profitability

3.2.2 In this report estimates of profitability are shown on both an accounting and an economic ROCE basis. While AlixPartners considers that capital-based measures may be subject to significant interpretation challenges in the context of a low-capital intensity sector such as payday lending (see above), this approach has been adopted because the ROCE measure has been used in market investigations concerning comparable products (*Home Credit*), and to allow comparisons against profitability results set out in the CC's profitability WP. Further details on how these measures are derived are provided below:

Accounting ROCE

3.2.3 In the case of Wonga, returns and capital employed are based on information provided by Wonga in relation to the period 2007 to 2013 (based on actual results) and for 2014 (a forecast year). This information updates that provided previously to the CC in response to the financial questionnaire in order to **[CONFIDENTIAL]**[11]. The earnings values used are before interest and tax, after**[CONFIDENTIAL]**. Capital employed is based on the average of the opening and closing balances for each year.

3.2.4 In the case of other firms in the sector, information has been collated from annual reports. Returns are calculated as EBIT divided by average capital employed (measured as total assets less current liabilities).

3.2.5 While simple to calculate, the accounting ROCE's reported in this paper may overstate the underlying profitability of payday lenders to the extent that they fail to take account of assets used by the business to generate future returns, but which are not recognised in the accounts.

Economic ROCE

3.2.6 The CC typically estimates profitability using accounting measures adjusted for economic factors such as intangible assets not recognised on the balance sheet. This approach has been used consistently since the CC set out criteria for the inclusion of intangible assets in the *SME Banking* market inquiry[12].

[11] The changes made in the revised financial schedule were set out in detail in Wonga's Response to the Profitability Working Paper, March 14. **[CONFIDENTIAL]**. See §2.2.3 and 2.2.4 of the Wonga Response.

[12] Competition Commission (2002), '*The supply of banking services by clearing banks to small and medium-sized enterprises within the UK*'

3.2.7 The CC set out its preferred approach to the capitalisation of costs in the *SME Banking* inquiry, and has subsequently referred to its approach in a number of other market inquiries. The appropriate treatment will depend on the nature of the specific intangible asset identified and the context. In particular, the CC's criteria for considering whether costs should be capitalised, and hence a return on them allowed, comprise three conditions:

(a) they must comprise costs incurred now, primarily to obtain earnings in the future;

(b) these costs must be additional to those necessarily incurred at the time in running the business; and

(c) they must be identifiable as creating such assets separate from those that arise from the general running of the business.

3.2.8 AlixPartners notes that these criteria have been subject to criticism and there is significant uncertainty as to whether or not these conditions are appropriate to capture the proportion of costs which should be capitalised in order to allow an assessment of profitability which provides a meaningful reflection of economic returns[13].

3.2.9 Given this uncertainty, AlixPartners has adopted a number of alternative approaches to the measurement of intangible assets, in particular following the principle that the CC adopted in its revised assessment of the profitability of home credit providers in adopting a 'maximum' value of intangible assets to ensure profitability was not overestimated[14].

3.2.10 In particular, AlixPartners has valued assets according to the following approaches:

[13] In Sir Bryan Carsberg's review of the CC's report on *SME*, he states that he is 'doubtful about the rationale for the disallowance' of a proportion of marketing expenditure to be capitalised. Source: Carsberg, B. (2010), 'Report on certain issues arising out of the report by the Competition Commission on the supply of banking services by clearing banks to small and medium-sized enterprises', § 12. Available at http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/fin_comcom_cars.htm. In addition, it is not straightforward to identify costs 'additional to those necessarily incurred at the time in running the business' as to do so would require an understanding of what the business would look like without intangible assets. This is impractical and in some instances counterintuitive. For example, if a business did not incur costs acquiring customers it would not have customers and therefore would not have a viable business. Furthermore, while AlixPartners considers it reasonable to identify a 'list' of potential intangible assets, it is not straightforward to model or ascertain the relationship between costs that may in combination jointly create intangible assets.

[14] To account for assumptions and estimates made in valuing intangibles, the CC conducted sensitivity scenarios, with the maximum value of intangibles considered being 20 per cent of tangible capital employed. Source: Competition Commission (2006), 'Home credit market investigation', p. 3-29, § 3.120.

(a) ***Bottom-up assessment (referred to here as 'MEA 1')*** – The value of Wonga's intangible assets not already recognised on the balance sheet is estimated based on identifying the cost of developing those assets over time[15].

(b) ***Adjustment for growth phase*** – During a growth phase, capitalising costs results in an increase in operating profits as the removal of costs from the measure of operating profit is not matched by an increased amortisation charge to reflect the capitalisation of these costs[16]. AlixPartners does not consider this to be very meaningful from an economic analysis of profitability which seeks to determine whether future profitability will be substantially above the competitive benchmark. It is therefore assumed that the amortisation charge is equal to capitalised costs, or, in other words, that the economic adjustments for intangibles do not affect operating profits but rather lead only to a change in the value of capital employed. This is likely to make the results more consistent with the 'steady-state' view of profitability, which is more relevant to the assessment than historic results. Nonetheless, for completeness, another scenario – labelled 'MEA 1b' – is modelled and reported, where this assumption is not made (i.e. allowing profits to be affected by the difference between capitalisation and amortisation).

(c) ***Market to book ratios (MEA 2)*** – A second approach is to uplift Wonga's accounting value of capital employed for the market-to-book ratio applying to publicly listed payday lending companies in the US and elsewhere. The risk of 'circularity' (where any 'excess profits' may be capitalised in the market's valuation of the assets) is unlikely to apply in this case because the benchmarks used are primarily taken from what AlixPartners understands are the highly competitive short-term credit sectors in the US and Australia. Therefore, market-to-book ratios are considered to be a useful alternative to the MEA 1 approach.

(d) ***CC maximum value approach in the Home Credit inquiry (MEA 3)*** – a third approach is to apply an uplift to book capital employed based on the approach adopted by the CC in previous inquiries. In the *Home Credit* inquiry, the CC adopted a 'maximum' value of

[15] AlixPartners recognises that the theoretically correct approach would be to value these assets on what a new entrant would have to incur to replicate them and not what Wonga actually spent developing them (which also could in more recent years be the cost of *maintaining* the asset in question and not the more relevant cost of what it cost to *establish* the asset). However, AlixPartners notes that the CC typically adopts the approach of examining historically incurred costs when valuing intangibles. Also, in this instance, Wonga's historic costs in this area are the cost of establishing the asset and are, arguably, likely to be close to what a new entrant would now have to incur.

[16] This is consistent with growth companies having capital expenditures that exceed the (tax deductible) depreciation charge, resulting in capital allowance incentives to encourage investment.

intangible assets to ensure profitability was not overestimated[17]. AlixPartners notes that payday lending shares some features with the home credit sector (for example, relatively small loans are offered over variable loan periods), and has therefore applied an uplift based on the CC's approach in this inquiry.

3.2.11 In terms of the MEA 1 (bottom up) approach, AlixPartners' review of Wonga's business has indicated that the following are the key intangible assets not recognised on its balance sheet:

(a) Staff training/a trained workforce.

(b) Recruitment costs.

(c) Customer acquisition costs.

(d) IT costs relating to development of software/hardware or 'know how' not already capitalised.

(e) Knowledge of customer creditworthiness.

(f) Regulatory compliance.

(g) Business continuity.

(h) Costs incurred before incorporation including foregone opportunities.

(i) Start-up losses.

3.2.12 These intangible assets are briefly discussed below.

3.2.13 In the *SME* and *Home Credit* inquiries, the CC recognised a *trained workforce, customer acquisition costs, IT costs and knowledge of customers' creditworthiness* as intangibles relevant to include within the capital base[18]. AlixPartners considers that these intangible assets also apply to Wonga. It is also reasonable to capitalise recruitment costs alongside staff training costs, as these expenditures are incurred: primarily to generate future benefits; in addition to the day-to-day running of the business; to create an identifiable intangible asset associated with a trained

[17] To account for assumptions and estimates made in valuing intangibles, the CC conducted sensitivity scenarios, with the maximum value of intangibles considered being 20 per cent of tangible capital employed. Source: Competition Commission (2006), 'Home credit market investigation', p. 3-29, § 3.120.

[18] In the *SME Inquiry*, the CC recognised these as relevant intangible assets. Source: Competition Commission (2002). 'The supply of banking services by clearing banks to small and medium-sized enterprises', chap. 2: conclusions, p. 65, § 2.251.
In *Home Credit*, the CC again recognised each of these as intangible assets that should be considered. Source: Competition Commission (2006), '*Home credit market investigation*', p. 3-26, § 3.111.

workforce. Similar reasoning applies to *regulatory compliance* and *business continuity* costs, although these have an immaterial impact on the results.

3.2.14 The founders of Wonga also incurred costs *prior to the incorporation* of Wonga (both in terms of foregone opportunities, i.e. salaries, and other costs), and these should be quantified and included in the starting capital base since the business would not exist without these costs having been incurred.

3.2.15 In terms of *start-up losses*, it is reasonable to suppose that investors in Wonga would have anticipated the need to fund potential and/or actual losses in the early years of operation, during which time credit models would be refined, and greater understanding of the characteristics of consumers would be built up. It is further reasonable that such losses, which would have the impact of reducing capital employed, would nevertheless need to be recouped over time. For example, if a business with an initial shareholder capital of £100 incurred £10 of losses in year 1, the capital employed falls to £90. However, investors would expect a return on their full investment (in this case comprising £90 of shareholder funds and start-up losses of £10 carried forward).

3.2.16 Wonga's start-up losses are, in effect, driven by the accounting policy leading to expensing of costs which in fact reflect intangible investments in the business, such as acquisition costs and knowledge of the customer base. In making economic adjustments to reflect these intangible adjustments in the capital base, there is therefore no need to make any specific adjustment to allow for start-up losses.

Time period and other issues

3.2.17 Profitability is estimated over the following time periods:

(a) 2007-13 – this reflects the period from the incorporation of the business in August 2006 to the end of 2013 (the last year for which Wonga's actual allocation schedule is available)[19].

(b) 2008-12 – results for other companies in the sector are typically available up to 2012. The period 2008-12 is the reference period considered by the CC.

(c) 2014 – data provided by Wonga includes updated forecasts for 2014 undertaken by the business (provided in Wonga's allocation schedule, which accompanies this report).

[19] As Wonga's 2007 statutory accounts, reported as Quickbridge (UK) Limited, were for the extended period from 4 August 2006 to 31 December 2007, references to the period 2007-12 hereafter denote the period from 4 August 2006 to 2012.

3.2.18 In terms of other adjustments, the CC has previously acknowledged the need to account for '*remuneration when this is partially through profits rather than salaries*'[20]. Without doing so, any profitability analysis will overstate returns given that a potentially significant portion of the salaries expense has not been adequately taken into account. Salaries have therefore been adjusted for Wonga to reflect its start-up nature (as discussed in Section 4). This adjustment is made based on management guidance from Wonga.

Aggregation

3.2.19 AlixPartners' understanding is that Wonga considers payday lending to form part of a larger market for short-term credit (as set out in its response to the CC's Annotated Issues Statement). An assessment of the correct market definition is outside of the scope of this report and profitability is considered at the following levels of aggregation, (without prejudice to any further work to model the impact on 'industry' profitability of including other short-term credit products such as overdrafts and credit cards):

(a) *Wonga's UK payday-lending business ('UK Little Loans')*. This is the entity that Wonga reported data for as part of its response to question 1 of the CC's Financial Questionnaire.

(b) *UK payday lending industry*. The CC is ultimately interested in the profitability of the payday lending industry or at least the companies that comprise a large part of the industry rather than the profitability of an individual company. The accounting and economic profitability of the sector has therefore been estimated by AlixPartners and this has been informed in part by the analysis of Wonga.

Benchmarking/interpretation of the results

3.2.20 While a formal benchmarking assessment of Wonga's returns is outside of the scope of this report, the CC should bear in mind the following factors when interpreting the profitability results:

(a) The CC has in many previous inquiries compared outturn or *ex post* profitability with the cost of capital to assess whether returns are 'persistently and substantially' above the cost of capital. However, the cost of capital is an *ex ante* concept of the required return of equity and debt investors.

(b) A comparison of outcome returns with the cost of capital is particularly inappropriate for start-up companies or immature industries where outcome returns could differ from the

[20] See Competition Commission (2013), '*Statutory audit services for large companies market investigation*', §7.83.

cost of capital for a variety of reasons or where the industry has been subject to significant change. Furthermore, the CC itself has recognised the fact that differences between profitability and the cost of capital do not necessarily reflect market power[21]. For example, it could reflect superior innovation, efficiency or quality. In Wonga's case it reflects the creation of an innovative product which has successfully challenged the offering of traditional lenders and has been very popular with customers.

(c) Indeed, the CC may also wish to consider the extent to which any gap between returns and cost of capital (both for Wonga and the industry) may reflect 'survivor bias' in that companies that did not succeed are not in the CC's sample or have a lower weight in any industry average. The CC has in the past discussed expected profitability and 'risk adjusted returns', for example in the *Movies on Pay TV* inquiry[22]. Whereas the data requested by the CC reflects, in Wonga's case, a successful outcome scenario, other scenarios could have developed since incorporation. In this context, AlixPartners considers that the expected profitability at the time of the investment would be a better comparison to the cost of capital (as discussed further below). Alternatively, actual cash flows could be adjusted for different risk profiles to determine what a risk-adjusted level of profitability would be.

(d) The industry is immature and is in a transitional growth phase. The reference period used by the CC of 2008-12 therefore does not reflect a sufficient period of time upon which the CC could make any reasonable conclusion as to whether profitability is 'persistently' above the competitive benchmark. It is far from clear that initial rewards to innovation will persist over time. A review of Wonga's profitability in Sections 4 and 5 demonstrates that its profitability **[CONFIDENTIAL]**. This demonstrates the importance of examining trends in profitability and forward-looking profitability scenarios.

(e) Wonga considers that the appropriate market definition for the market in which it operates is wider than that which the CC's inquiry is focusing on. To the extent that this is the case, the analysis of the financial performance of one segment within the wider market may lead to inappropriate findings as to how the market operates.

[21] The CC states in its market guidelines that profitability above the 'normal' level could be explained by '*cyclical factors, transitory price or other marketing initiatives, and some firms earning profits as a result of past innovation, or superior efficiency*'. Source: Competition Commission (2013), '*Guidelines for market investigations: Their role, procedures, assessment and remedies*', p. 28, § 117.

[22] The CC '*recognised that it was possible for a company to earn profits in excess of its cost of capital within a competitive market particularly where significant investment risks had been taken*'. Source: Competition Commission (2012), '*Movies on Pay TV market investigation*', p. 5-31, § 5.114

3.3 CONCLUSIONS

3.3.1 From the discussion above, it can be concluded that:

(a) Given the features of the market, the CC should proceed cautiously in undertaking an analysis of profitability and in interpreting any results of its analysis.

(b) To the extent that any analysis of historical performance is carried out despite the interpretation risks highlighted above, adjustments are required to ensure that an appropriate measure of the capital base is applied.

(c) A wider range of metrics of competitive pressures than just profitability is required (for example, including trends in profitability rather than just the level as well as a proper consideration of the evidence relating to entry and exit).

4 PROFITABILITY RESULTS FOR WONGA

4.1 ACCOUNTING RETURNS

4.1.1 The starting point of this analysis is the financial data provided to AlixPartners by Wonga, in the revised allocation schedule which accompanies this report. This data sets out, among other things, earnings before interest and tax and capital employed (defined as total assets minus current liabilities)[23]. This dataset has been extended in this report to include Wonga's management accounts for financial year 2007 (the first year for which Wonga reported statutory accounts). Table 4.1 provides a summary of the key data points for revenue, profits and capital employed ('CE').

4.1.2 The table clearly shows that Wonga's accounting ROCE **[CONFIDENTIAL]**. Following the CC's approach, AlixPartners has calculated average capital employed for the year by taking the average of year-end values (e.g. for 2012 the relevant value is the average of 2011 and 2012 year-end capital employed). A more precise estimate of capital employed would be based on monthly averages, which may vary from the average of year-end values due to fluctuation month-on-month within the year. For example, in 2012 the average value of *monthly* capital employed is **[CONFIDENTIAL]**, compared to an average of year-end figures of **[CONFIDENTIAL]**. Similarly, for 2013, the average value of monthly average capital employed is **[CONFIDENTIAL]**, whereas the average of year-end values used in this report is **[CONFIDENTIAL]**. Although a monthly average of capital employed might be a more accurate reflection of the average capital employed throughout the year, the impact on results is not material and the use of a monthly average capital employed does not have an impact on the trend described.

4.1.3 The values of capital employed in the table include **[CONFIDENTIAL]**[24]. This adjustment was discussed in Wonga's response to the WP, but was not in fact taken into account in the ROCE calculations provided in that response. As a result the ROCE values in Table 4.1 below are somewhat lower for 2011, 2012 and 2013 compared with Table 3.1 of the Working Paper Response.

[23] AlixPartners' review of Wonga's business **[CONFIDENTIAL]**. The ratio of Wonga's capital employed to revenue since the business was incorporated **[CONFIDENTIAL]** (e.g. in 2009), which is consistent with the business seeking to operate as efficiently as possible from a capital perspective until it reaches a level at which it cannot extend further lending without additional funds. All ROCE results presented in this report are pre-tax nominal.

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4.1.4 The table above clearly demonstrates that Wonga made early losses, becoming profitable in 2009 **[CONFIDENTIAL]**

4.2 ECONOMIC ADJUSTMENTS TO PROFITABILITY

4.2.1 In line with the overall approach described in Section 3, the accounting data provided by Wonga is adjusted for various economic factors and, in particular, to recognise intangible assets not included in Wonga's balance sheet.

4.2.2 The economic profitability of Wonga's UK lending business in this report is based on detailed monthly data, which provides the level of detail required for a depreciated replacement cost valuation. Using monthly data also enables the valuation of intangible assets to take into account the timing of expenditures.

MEA 1 – Modern equivalent asset value

4.2.3 Regarding the value of Wonga's intangible assets not recognised on the balance sheet, AlixPartners' review has indicated limited evidence of the depreciated historic cost of tangible assets being significantly different from the modern equivalent replacement cost. The analysis in this section is therefore focused on the appropriate value of intangible assets. As discussed previously, capitalising costs during a growth phase creates a distortion as capitalised costs exceed the amortisation charge, increasing operating profits, while the reverse is the case for a company reducing in size. It is often useful to make a simplifying 'steady-state' assumption in undertaking profitability analysis, and for this reason operating profits are adjusted in this analysis to control for the growth distortion by assuming that the capitalisation and amortisation charges are the same. Nonetheless, results without making this assumption are also reported. Available evidence has also been reviewed to determine reasonable values for useful economic lifetime assumptions.

4.2.4 As discussed in Section 3.2, a number of intangible assets are identified, which can be classified into five categories:

(a) Customer acquisition costs.

(b) Knowledge of the customer base.

(c) Other intangibles (namely recruitment expenses, staff training and regulatory compliance/business continuity).

(d) Pre-incorporation costs including foregone opportunities.

(e) Start-up losses.

4.2.5 AlixPartners' methodology for the valuation of these intangible assets is set out below. The proportion of the costs to be capitalised is identified; the assets' useful economic life ('UEL') is determined; and then the net book values are derived for each intangible asset.

Marketing and customer acquisition costs

4.2.6 Marketing and customer acquisition costs comprise five types of costs:

(a) Marketing costs.

(b) Marketing staff costs.

(c) Ongoing affiliate commissions.

(d) Offline customer acquisition costs.

(e) Online customer acquisition costs.

4.2.7 For the reasons set out in Section 3, AlixPartners considers that marketing/customer acquisition costs are necessary expenditures to acquire new customers and also to retain existing customers via the provision of repeat loans. Therefore all such costs are capitalised. In terms of *marketing costs*, these are set out in Table 4.2 as reported in Wonga's management accounts. The cost grows over time as might reasonably be expected for a rapidly growing business.

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4.2.8 *Marketing staff costs* are not explicitly reported in Wonga's management accounts but AlixPartners' understanding is that these are part of 'London staff costs'[25]. Wonga has estimated that marketing staff costs are **[CONFIDENTIAL]** of London staff costs for 2007-13. Table 4.3 below reports the total for London staff costs as well as an allocation to the marketing team[26].

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4.2.9 *Ongoing affiliate commissions* are reported for 2007 and 2008 only. AlixPartners' understanding is that this cost refers to commissions paid to companies or individuals referring business to Wonga. Again, this delivers future economic benefits and therefore it would be reasonable to capitalise this cost fully. This cost is set out in the table below (noting that the cost is in £ thousands and not millions like the other tables).

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4.2.10 AlixPartners' understanding is that both *online and offline customer acquisition costs* are costs incurred solely for the purposes of acquiring new customers and ensuring retention. Wonga provided this data for 2007-13 and this is set out below noting that the business only made a

[25] To be conservative, only the staff costs of the Wonga legal entity, rather than the UK standalone firm, are taken into account in this particular case. For 2012 London staff costs were not recorded in the accounts provided by Wonga. These were estimated by taking the 2011 ratio of London staff costs to total operating costs and applied to 2012 and 2013 operating costs.

[26] This excludes an allocation of overhead costs such as facilities and is therefore a conservative estimate.

distinction between online and offline costs (e.g. TV advertising) from 2011 and so only totals are reported for 2007-10[27].

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4.2.11 In order to determine an appropriate UEL assumption, AlixPartners reviewed:

(a) Material submitted by Wonga to the CC[28] discussing the estimated value of the brand and research **[CONFIDENTIAL]**. This evidence points to **[CONFIDENTIAL]**. Consistent with this analysis no adjustment has been made to reflect any intangible brand value within the capital base.

(b) Data provided by Wonga on the breakdown of its 2012 customer base according to when they first became a Wonga customer. This is set out in Table 4.6 and suggests the average 'lifetime' of customers in 2012 **[CONFIDENTIAL]**[29]. However, this is 'backward-looking' and not an estimate of how long newly acquired customers (in different financial years) are expected to be retained. It is likely that significant proportion of customers who first took out a loan with Wonga in 2012 would also be customers in several years' time. New customers acquired in 2012 may have different characteristics to those acquired in early years (e.g. **[CONFIDENTIAL]**) and so it may be sensible to apply UEL assumptions that change over time.

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[27] As context, Wonga had **[CONFIDENTIAL]** new (L0) customers in 2012, implying an **[CONFIDENTIAL]** (although this is illustrative as these costs would also, presumably, also encourage repeat loans).

[28] See Competition Commission (2013), Market investigation into payday lending: response of Wonga Group to the Commission's market questionnaire', Annex 11B.

[29] Making a simplifying assumption that customers who first applied for a loan with Wonga in 2007 (and were still a customer in 2012) had been a customer for 60 months, those first a customer in 2008 had been a customer for 48 months, and so on. This is then weighted by the proportion of customers that were first a customer in each year, according to the proportions in the table above.

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4.2.12 Considering the analysis described above, a **[CONFIDENTIAL]** has been adopted for Wonga's customer acquisition asset. Based on monthly management accounts, a UEL assumption of **[CONFIDENTIAL]**, as an example, that only **[CONFIDENTIAL]** in January of a financial year would be reflected as an intangible asset at the end of the year.

4.2.13 Table 4.7 below sets out the total marketing and customer acquisition costs to be capitalised as well as the amortisation charge based on a **[CONFIDENTIAL]**. As discussed previously, the amortisation charge is significantly lower than the capitalisation charge reflecting a growing business. The net book values associated with intangible assets are reported later in this section based on the average of monthly values. However, year-end values are first presented for each intangible asset[30].

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Knowledge of customer creditworthiness

4.2.14 As discussed previously, the CC recognised *knowledge of customer creditworthiness* as an intangible asset in the *Home Credit* inquiry among others. This has been considered in light of Wonga's business and costs that potentially enhance Wonga's understanding of its customer base and from which it derives future benefits have been identified, and the relevant expenditures capitalised.

[30] Such that NBV = Previous year's NBV + capitalisation – amortisation.

4.2.15 AlixPartners does not have access to sufficiently detailed information to determine precisely the proportion of staff that should be allocated to developing Wonga's knowledge of customer creditworthiness or the cost of credit checks. For an innovative finance business such as Wonga, the experience of default losses helps the business recalibrate its credit scoring techniques and improves understanding of the creditworthiness of its customer base. Therefore, in order to estimate the value of Wonga's intangibles relating to *knowledge of customer creditworthiness*, a proportion of the value of bad debts has been capitalised. AlixPartners also deems this to be consistent with attempting to estimate the 'maximum' value of intangibles as per the CC's approach in the *Home Credit* inquiry.

4.2.16 **[CONFIDENTIAL]**have been capitalised **[CONFIDENTIAL]**, as it is likely that Wonga will benefit from enhanced knowledge of its customers and its own credit risk models for longer than the likely economic lifetime of individual customers (which, as set out previously, was assumed to **[CONFIDENTIAL]**). The table below sets out total write-off costs and allocation to the intangible asset arising from knowledge of customer creditworthiness[31].

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4.2.17 Given this, the table below reports the capitalised cost, the amortisation charge (assuming **[CONFIDENTIAL]**) and the net book value.

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Other intangibles

[31] Provisions are excluded on the basis that when an account is written-off, the provision is reversed and then recognised in full as a write-off. If, instead, only the 'un-provided' part of the loan is recognised as a write-off, the estimated costs to capitalise would be too low.

4.2.18 'Other intangibles' encompass the following:

(a) recruitment expenses;

(b) staff training; and

(c) regulatory compliance/business continuity ('business continuity').

4.2.19 *Recruitment expenses* are incurred by Wonga in obtaining and retaining employees. These costs are reported in the detailed accounts provided by Wonga. The acquisition and retention of qualified staff brings benefits to Wonga in future and therefore AlixPartners considers it to be reasonable to capitalise this cost fully, although it should be noted that this is **[CONFIDENTIAL]** and **[CONFIDENTIAL]**.

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4.2.20 **[CONFIDENTIAL]**

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4.2.21 Similarly, it is reasonable to assume that *staff training* increases the quality of Wonga's workforce and helps to retain employees. Therefore future benefits are realised and the cost should be fully capitalised. Wonga has provided annual data on staff training costs for 2008-12 from their internal records. These are set out in Table 4.12 below and for simplicity a zero value is assumed for 2007. When capitalising costs, AlixPartners has made the reasonable assumption that these costs were spread evenly across the year.

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4.2.22 An analysis of staff lifetimes is used to determine an appropriate UEL for this asset as well as recruitment costs. The table below sets out the average retention rates for December 2012 for staff employed by Wonga at the end of each of the previous years. This shows that **[CONFIDENTIAL]**. The staff retention analysis supports a UEL assumption for staff training and recruitment of **[CONFIDENTIAL]**.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

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4.2.23 Capitalisation, amortisation and net book values for staff training on this basis are set out in the table below.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

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4.2.24 In terms of *regulatory compliance and business continuity* costs, AlixPartners' understanding is that Wonga incurs such costs to ensure regulatory compliance and overall functioning of the business. These costs ensure that Wonga continues to operate in the future and therefore provides future benefits to the business. Wonga has provided data on expenditures on legal and professional services costs for 2011 and 2012. AlixPartners understands that all such expenditures are associated with regulatory compliance and business continuity and should therefore be capitalised. The ratio of these costs to total operating costs in 2011 is then assumed to apply for the period 2007-10, noting that the costs are small in comparison to, say, customer acquisition costs. Similarly, the ratio of these costs to total operating costs in 2012 is assumed to apply for 2013.

4.2.25 In terms of business continuity, this is a minor intangible asset in terms of value compared to, say, customer acquisition costs. It is not straightforward to determine the UEL assumption of such

expenditures and an assumption of **[CONFIDENTIAL]**. Relevant expenditures, the amortisation charge and net book values are reported in Table 4.15 below.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]

4.2.26 Finally, the combined data for 'other intangibles' are set out in the table below.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
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Start-up losses

4.2.27 As discussed previously, start-up losses have not been capitalised to avoid potential double-counting with other intangible assets.

Pre-incorporation costs

4.2.28 Pre-incorporation costs are costs incurred by Wonga's founders before its incorporation. These costs may include foregone opportunities such as salaries that could have been earned as an employee of an existing company.

4.2.29 AlixPartners assumes that the two founders of Wonga could each have earned a salary of **[CONFIDENTIAL]** in the year leading up to Wonga's incorporation, which is the period of time they spent researching and developing the business plan. This is an opportunity cost and therefore a valid economic cost that should be recognised as being necessary in order to realise future economic benefits. This asset has not been amortised as it has an unknown UEL that is the same as the business itself. This is similar to an accounting treatment of original shareholder funds, which are not amortised.

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Net book value of intangible assets

4.2.30 The net book value of the intangible assets discussed for 2007-13 are summarised below.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

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4.2.31 The average total values of intangible assets for each year are presented below. These values are derived from Wonga's monthly accounts data and are not the simple average of values reported in Table 4.18. It should be noted that Wonga has refined its marketing staff cost estimates since its response to the CC's profitability working paper, and as a result the average of year net book values in Table 4.19 are slightly lower than those in Table 3.2 of Wonga's response.

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4.2.32 Finally, these intangible assets (as per the table above) are added to the accounting value of year-average capital employed (as per Table 4.1) to derive an economic estimate of total average capital employed (as below). This 'bottom up' scenario is referred to as MEA 1.

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MEA 2 – Uplift based on market-to-book ratios

4.2.33 While the previous discussion sought to estimate the modern equivalent asset value of Wonga's intangible assets based on considering the costs incurred in developing these assets, in this section a more 'high-level' approach is taken to determine the possible adjustment to accounting assets to recognise intangibles.

4.2.34 In particular, a 'market-to-book' ratio is applied based on accounting and market data from a selection of publicly listed payday lending companies – a list of 12 similar companies (both by size and levels of focus on payday lending) is set out below with a brief description of each. This approach should minimise the risk of circularity (where any 'excess profits' among companies with substantial market power may be capitalised in the market's valuation of the assets) because the benchmarks are primarily taken from what AlixPartners understands are the highly competitive short-term credit sectors in the US and Australia.

Table 4.21: Publicly listed payday lending companies

	Country listed	**Description**
Advance America	United States	Diversified
EZCORP	United States	Diversified
First Cash Financial	United States	Diversified
QC Holdings	United States	Largely in-store
Cash America	United States	Diversified
DFC Global Corp	United States	Diversified
Albemarle & Bond Holdings	UK	Diversified
H&T Group	UK	Diversified
Cash Converters International Franchise Group	Australia	Diversified
Thorn Group	Australia	Primarily online

Money3	Australia	Diversified
Cash Store Financial	Canada	In-store only

Source: Company accounts and AlixPartners analysis.

4.2.35 The table below sets out the market-to-book ratios for 2007-12 for these companies[32]. Book values for debt have been used in calculating the ratios, as the market value of outstanding debt for these companies was less readily available. It is possible that the ratio of market to book value of debt is lower than the corresponding ratio for equity, which could potentially overestimate the true market-to-book ratio[33].

Table 4.22: Market-to-book ratios for publicly listed payday lending companies

	2007	2008	2009	2010	2011	2012
Advance America	2.1	0.9	1.3	1.3	1.5	- [34]
EZCORP	2.4	2.6	1.5	1.7	1.9	1.3
First Cash Financial	1.8	2.5	2.8	2.9	3.1	3.1
QC Holdings	2.1	1.1	1.1	0.9	0.9	0.8
Cash America	1.5	1.2	1.3	1.2	1.3	1.1
DFC Global Corp	-	1.2	1.1	1.2	1.3	1.2
Albemarle & Bond Holdings	2.5	1.6	1.8	1.7	2.1	1.4
H&T Group	1.6	1.3	1.6	1.6	1.3	1.1
Cash Converters International Franchise Group	2.2	0.8	1.1	1.3	1.5	1.2
Thorn Group	1.5	1.1	0.9	1.5	2.1	1.5
Money3	1.1	0.7	0.5	0.7	0.6	0.6
Cash Store Financial	1.2	1.1	2.0	2.7	2.1	1.4
Weighted average market-to-book ratio[35]	**1.8**	**1.4**	**1.4**	**1.5**	**1.6**	**1.3**

[32] 2012 was the last year for which sufficient data was available for the sample.
[33] This will in large part depend upon the movement in interest rates in the respective countries relative to equity prices. As market interest rates have generally fallen since 2008, the market value of debt is expected to exceed the book value, although whether the ratio is higher or lower than the corresponding ratio for equity is unclear.
[34] No 2012 data was available for Advance America.

Source: Company accounts and AlixPartners analysis.

4.2.36 The weighted average market-to-book ratio is then applied to the book value of Wonga's accounting capital employed (as set out in Table 4.1). As previously discussed, 2012 is the last year for which sufficient data is available. For 2013, the 2012 market-to-book ratio is used. The values for MEA 2 are lower in each year than MEA 1.

[35] Weighted by the denominator (i.e. the book value of equity plus the book value of debt).

Table 4.23: MEA 2 capital employed, 2007-13

£m	2007	2008	2009	2010	2011	2012	2013
Book value	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
Market-to-book ratio	1.8	1.4	1.4	1.5	1.6	1.3	1.3
MEA 2 capital employed	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

Source: Wonga and AlixPartners analysis

***MEA 3 – The CC's approach in the Home Credit* inquiry**

4.2.37 The value of Wonga's intangibles has also been estimated by adopting a similar adjustment as applied by the CC in the *Home Credit* inquiry. AlixPartners has identified sufficient similarities between payday lending and home credit lending (such as lending of relatively small amounts for relatively short periods of time) that the application of this approach is considered to be appropriate.

4.2.38 In the *Home Credit* inquiry, the CC estimated the intangibles in four cost categories: staff acquisition, customer acquisition, knowledge of customer base and IT systems. The CC produced two results of significantly different magnitude – an initial 'best-estimate' and a subsequent 'top-end' estimate that represented the CC's view of the maximum plausible value for intangibles for the home credit sector. The top-end valuation comprised 20% of tangible capital employed[36].

4.2.39 However, as demonstrated in Appendix 8, payday lending has lower capital intensity[37] than home credit (Wonga's capital intensity in 2012 was **[CONFIDENTIAL]**, compared to Provident's capital intensity of 209.7%). An adjustment is made for this by taking the intangible asset uplift applied by the CC as a proportion of revenue, rather than capital employed, and applying this to Wonga's revenue to derive the MEA 3 estimate of capital employed. The resulting uplift is set out in the table below.

[36] To account for assumptions and estimates made in valuing intangibles, the CC examined some sensitivity scenarios, with the maximum value of intangibles considered being 20 per cent of tangible capital employed. Source: Competition Commission (2006), 'Home credit market investigation', p. 3-29, § 3.120.
[37] Capital intensity is the ratio of capital employed to revenue.

Table 4.24: Home Credit uplift as a proportion of capital and revenue

%	
Home Credit uplift (% of capital employed) (a)	**20.0**
Provident (Home Credit) capital intensity (b)	**209.7**
CC Home Credit uplift (% of revenue) (c) = a * b	**41.9**[38]

Source: Wonga and AlixPartners analysis

4.2.40 On this basis, the table below reports the valuation of Wonga's total capital employed (calculated by adding 41.9% of revenue to the accounting value of year-end capital employed in Table 4.1).

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4.3 ECONOMIC PROFITS

4.3.1 While the analysis above has discussed capital employed, this section discusses the estimate of economic profits against which to compare against capital employed. As discussed in Section 3, the growth distortion arising from capitalisation exceeding amortisation during a period of growth prior to steady state has been controlled for by adjusting the assumed level of amortisation to match the level of capitalisation in the profit and loss calculation. The result of this adjustment is to preserve the level of operating profit (prior to the including of intangible assets). It is nevertheless assumed that the net book value of intangibles increases during the growth phase [39]. However, falling capitalisation in later years leads to the MEA 1b returns being lower than the MEA 1 approach. This is because a large amortisation charge (from intangible assets capitalised in previous years) may be larger than the amount capitalised. While the main results reported as MEA 1 include this adjustment, a scenario in which profits are reported without this growth distortion adjustment is shown for purposes of comparison. These are set out below.

[38] This figure is derived by multiplying capital intensity by the uplift as a proportion of capital employed.
[39] In the steady-state, capitalisation and amortisation cancel out and so this represents a simplifying steady-state assumption, thus controlling for the growth distortion.

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4.3.2 As discussed in Section 3, salaries in 2007 and 2008 are adjusted upwards by **[CONFIDENTIAL]** (based on management guidance) to reflect the presence of share compensation benefits, which enabled salary costs to be lower than they would have been in a business with a more complete separation between owners and managers.

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4.3.3 Finally, the table below presents the revised EBIT figures after the adjustment to salary costs in 2007 and 2008. The 2012 figure also includes the effects of allocating some of Wonga's service fee to the UK business.

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4.4 RESULTS OVER 2007-13

4.4.1 The table below sets out Wonga's ROCE for the period 2007-13, including adjustments for intangible assets under each approach.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

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4.5 CONCLUSIONS

4.5.1 After economic adjustments, the calculated ROCEs for Wonga are in a range**[CONFIDENTIAL]** over 2007-13 under the MEA 1 approach. MEA 2 ROCEs are in a slightly narrower range, between -**[CONFIDENTIAL]**, whereas ROCEs under the MEA 3 approach **[CONFIDENTIAL]**, at between **[CONFIDENTIAL]**.

4.5.2 The results clearly demonstrate that returns have **[CONFIDENTIAL]** For example, under the MEA 1 approach, ROCE has **[CONFIDENTIAL]**. The pattern of profits is consistent with what would be expected in a dynamic and competitive market. Initially, Wonga made losses in the early years before becoming profitable as it refined its offer to customers and improved its credit assessment models. **[CONFIDENTIAL]**.

4.5.3 Given these points, and taking account of the need to carefully interpret any historical evidence given the context of the Wonga business model (low capital intensity, innovation, and efficiency), the evidence on historical returns earned by Wonga does not suggest that there exists substantial or persistent excess returns.

5 FORECAST FOR 2014

5.1 ALIXPARTNERS' APPROACH

5.1.1 The CC's evidence on profitability focuses on the period 2008 to 2012. However, given the fast rate of growth experienced in this period, the relative immaturity of the sector, and the significance of recent changes in the competitive and regulatory conditions within the market, profitability should also account for forward-looking information.

5.1.2 Wonga has provided AlixPartners with updated financial information for 2013, as well as financial information forecasts for 2014. This information accompanies this report. AlixPartners' understanding is that these forecasts are the result of a **[CONFIDENTIAL]** (see Section 2 of Wonga's response to the CC's profitability working paper for further detail). **[CONFIDENTIAL]**. Net revenue, total costs and EBIT[40] forecasts for 2014 are shown in Table 5.1 below, with actual results for 2012 and 2013 presented alongside for comparative purposes.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

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5.1.3 The table shows a **[CONFIDENTIAL]**. As noted above in Section 1, AlixPartners understands that these forecasts reflect a number of key trends, in particular:

(a) continued competition from rivals, with an increased focus on price competition;

(b) the shift to **[CONFIDENTIAL]**, which is expected to result **[CONFIDENTIAL]**;

(c) an increase in provisioning rates reflecting the new FCA rules on CPA, as well as a significant increase in staff costs reflecting the more time-intensive nature of collections activity from 2014 onwards.

[40] EBIT is calculated from the forward-looking accounts data provided to by Wonga and excludes share-based payments and exchange-rate differences.

5.1.4 Based on Wonga's forecasts, intangibles for 2014 were calculated as follows:

(a) *MEA 1* – Operating cost forecasts provided by Wonga are used to undertake a detailed depreciated replacement cost valuation of intangibles for future years. Where the relevant data was not available, uplifts were applied based on 2011 cost data[41] (for example knowledge of customer creditworthiness costs over 2013-14 to comprise the same proportion of total operating costs as in 2011 and 2012 where applicable).

(b) *MEA 2* – As it is not possible to calculate market-to-book ratios for future years, 2012 market-to-book ratios are applied to accounting capital employed for 2014 to derive the estimate of economic capital employed. The market-to-book ratio for 2012 was at the lower end of the range across 2007-12, so this can be considered a conservative approach.

(c) *MEA 3* – Consistent with the MEA 3 approach for other years, an uplift based on the CC's approach in *Home Credit* is applied to accounting capital employed in order to derive Wonga's economic capital employed for 2014.

5.1.5 The corresponding ROCE for 2014 is then calculated based on these adjusted values of capital employed for each year.

5.2 2014 ANALYSIS

5.2.1 Analysis for 2014 is presented alongside 2012 and 2013 results from Section 4 for comparison. As a starting point, the accounting value of capital employed for the period 2012-14 is set out in the table below. Analogous to the analysis in Section 4, this data is set out in the CC's financial template.

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[41] As set out previously, **[CONFIDENTIAL]**.

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5.2.2 Each approach to estimating profitability for 2014 is set out in more detail below.

MEA 1 – Modern equivalent asset value

5.2.3 As described above, intangible assets are estimated by undertaking a detailed depreciated replacement cost valuation for 2014 based on the revised allocation schedule provided by Wonga, specifically:

(a) *Marketing and customer acquisition costs* – Marketing costs and customer acquisition costs are detailed in the forecast profit and loss accounts provided by Wonga. As discussed in Section 4, marketing staff costs are also capitalised. Wonga estimated that marketing staff costs would be **[CONFIDENTIAL]** of London staff costs for 2014[42].

(b) *Knowledge of customer creditworthiness* – In Section 4 the value of this intangible asset is estimated by capitalising a proportion of bad debts. Data for 2014 does not set out bad debts, so bad debts for 2014 are assumed to comprise the same proportion of revenue as in 2011; the last year in which bad debts were provided in the accounts used in AlixPartners' analysis.

(c) *Pre-incorporation costs* – As detailed in Section 4, this cost relates to the opportunity cost of foregone opportunities and is not amortised. A net book value of **[CONFIDENTIAL]** is assumed for 2014, as for 2007-13.

(d) *Recruitment* – This cost is provided in the allocation schedule provided to AlixPartners by Wonga and so the value of intangible assets is calculated as per the analysis in Section 4.

(e) *Staff training* – Staff training costs were provided by Wonga for 2011 and 2012 only, and these are therefore estimated for 2014 based on the data for 2012, assuming these costs represent a fixed proportion of total operating costs.

(f) *Regulatory compliance and business continuity* – Similarly, the relevant costs for estimating this intangible asset (legal and professional services costs) are not provided

[42] The **[CONFIDENTIAL]** in marketing staff costs as a proportion of total London staff costs in 2014 as compared with 2007-2013 reflects **[CONFIDENTIAL]**.

beyond 2012. Again, this is estimated based on the proportion of total operating costs in 2012.

5.2.4 These costs are capitalised using the same methodology employed in Section 4 (for example, using the same UEL assumptions) to derive the average net book values of these intangible assets, presented in the table below.

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5.2.5 These estimates of intangible assets (Table 5.3) are added to accounting capital employed (Table 5.2) to calculate the adjusted values of capital employed, which are set out in Table 5.4

MEA 2 – Uplift based on market-to-book ratios

5.2.6 In terms of MEA 2, the 2012 uplift to the forecast values is applied to obtain estimates of capital employed in 2013 and 2014. The market-to-book ratio for 2012 was **[CONFIDENTIAL]**, so this could be considered a conservative approach given the data limitations. The MEA 2 estimate of capital employed is set out in Table 5.4.

MEA 3 – Approach adopted by the CC in the Home Credit Inquiry

5.2.7 As set out above, the same approach is applied to 2014 as for 2007-13. Under the MEA 3 approach, an uplift of 41.9% is applied to Wonga's revenues to arrive at the estimated value of

economic capital employed. The revised value of capital employed for 2012-14 is set out in Table 5.4 below.

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5.2.8 Finally, economic ROCEs for 2012-2014 are calculated using the estimates of economic capital employed in Table 5.4. These are set out in Table 5.5 below.

[CONFIDENTIAL]

[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

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5.3 CONCLUSIONS

5.3.1 After economic adjustments, the calculated ROCEs between 2012 and 2014 are in a range of **[CONFIDENTIAL]**. The forecasts therefore support the conclusions reached in relation to the historical profitability evidence for Wonga, namely that there is no evidence of significant or persistent excess profits, particularly once the key features of the Wonga business model described above are taken into account.

6 RESULTS AT AN 'INDUSTRY' LEVEL BASED ON ANALYSIS OF WONGA'S PROFITABILITY

6.1 APPROACH

6.1.1 As set out in Section 3, the CC's focus should be the profitability of the payday-lending industry as a whole (or at least, as an approximation, the companies that comprise a large part of the industry) rather than the profitability of an individual company[43]. AlixPartners has therefore sought to estimate the accounting and economic profitability of the industry using publicly available information[44]. AlixPartners notes that Wonga considers the relevant economic market to be wider than payday lending and to encompass, for example, overdrafts and credit cards. However, this is outside the scope of this report.

6.1.2 As AlixPartners does not have access to the management accounts for Wonga's competitors, AlixPartners has been unable to undertake a company-specific depreciated replacement cost valuation of intangibles for these companies analogous to the MEA 1 calculations for Wonga in Section 4. A reasonable approach in the absence of detailed information is to apply the same uplift (as a proportion of accounting capital employed) as has been applied to Wonga's accounting capital employed, under each of the MEA 1 to 3 approaches, to the industry more generally.

6.1.3 AlixPartners' industry analysis was carried out as follows.

(a) A sample of 20 companies, including Wonga, were compiled which (i) report statutory accounts to Companies House, (ii) includes financial information (as small companies are exempt from reporting published profit and loss accounts) and (iii) undertake payday lending in the UK. This list of companies includes both online and store-based lenders as well as companies that also undertake activities unrelated to payday lending.

(b) The impact of economic adjustments under each MEA approach for Wonga is estimated as a proportion of Wonga's accounting average of year capital employed (see Table 4.1).

(c) The average of year accounting capital employed data for the 20 companies is uplifted by the same as that applied to Wonga under each of the MEA 1 to 3 approaches.

6.1.4 Some caveats apply to this approach and hence also to the results:

[43] For example, in the CC's statement of issues for the payday lending market investigation, it stated '*we will also consider the profitability of payday lending*'. Source: Competition Commission (2013), '*Payday lending market investigation: Statement of issues*', p.7, § 45.

[44] Data was sourced from annual reports obtained from Companies House.

(a) Ideally activities unrelated to payday lending would be stripped out from the analysis but this is not possible due to the lack of sufficiently detailed information.

(b) Also, these companies will have different accounting policies and in some instances accounting periods. Some of these companies may also be part of group companies, and potentially operate differing business models to Wonga with respect to how activities undertaken by the Group are recharged to the UK entity.

(c) Smaller companies are exempt from reporting profit and loss data in their statutory accounts and are therefore excluded from the sample. If these companies have lower profitability than the companies sampled here, estimates of 'industry' profitability may be too high. In addition, many companies entered the market during the period being examined, and therefore the mix of companies included in an average for a particular year varies. These results should therefore be taken as, at best, indicative of the level of profitability in the wider payday lending industry.

6.1.5 A list of the companies used in the sample is set out in the table below and is referred to here as the 'industry' although it clearly excludes a large number of smaller payday lending companies.

Table 6.1: Companies used in the industry definition

Wonga	Online
Instant Cash Loans	Diversified
MEM Consumer Finance*	Online
Wage Day Advance	Online
Express Finance (Bromley)	Online
Think Finance (UK)*	Online
The Loan Store Ltd*	Online
Albemarle & Bond	Diversified
Cheque Centres*	Diversified
Cash Converters	Diversified
TxtLoan Ltd	Online
National Cash Advance Ltd	Offline
Lending Stream Ltd*	Online
CFO Lending Ltd	Online

Haymarket lending	Online
Kesef Ltd*	Online
SRC Transatlantic*	Offline
Early Payday Loan	Online
Speed-e-Loans	Online
H & T Group	Diversified

Source: AlixPartners analysis

6.2 ANALYSIS

6.2.1 The table below presents aggregate data for profits for the 20 companies in the sample including Wonga over the period 2007-12[45]. EBIT (if available in the accounts) or operating profits are used in the analysis, although the difference between the two should be relatively limited (assuming profits/losses on disposal of fixed assets roughly net out over time and across the companies in the sample)[46].

6.2.2 The results presented in this report differ for the year 2012 from those presented in Wonga's response to the WP. This is because companies marked with an asterisk were not included in the 2012 sample analysed in Wonga's response to the WP. However, AlixPartners has since obtained updated financial information for these companies, for the purposes of conducting the analysis presented in this report. MEM Consumer Finance reported results for the 18-month period to June 2012; the values for this period were scaled and used only for 2011 in the analysis presented in the WP response but have, in this report, been scaled and presented as the figures for both 2011 and 2012. AlixPartners notes that the ROCEs presented in this report do not differ materially from those presented in Wonga's response to the WP.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]

[45] 2012 was the latest year for which sufficient data was available.
[46] Wonga's management accounts profits are shown in the table such that when the uplift is applied to Wonga, the results reconcile to the economic profitability results in Section 4.

6.2.3 The calculation of capital employed is based on determining the sum of total equity, short-term debt and long-term debt for each company. This has required some judgement about whether a particular liability should be considered debt for the purposes of this analysis[47]. Nonetheless, given the relatively large number of companies included in the sample, this is not expected to materially affect the profitability estimates. The table below reports these estimates noting these are average for the financial year.

[CONFIDENTIAL]

[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]

6.2.4 Based on this data, the table below reports the accounting ROCE for the payday lending industry. Industry profitability appears to be **[CONFIDENTIAL]** (see Table 4.1) highlighting the point made in Section 3 that single firm measures may be distorted if that firm is unusually innovative, high performing or efficient. The table below sets out the weighted average ROCE for the industry as well as the range. This demonstrates the level of dispersion among the industry; some companies have performed strongly while others have made large losses.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
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6.2.5 Average ROCE ratios fail to capture the dynamics of the market. A total of 11 companies have made losses over the period, as can be seen in Appendix 3, and the range of returns is wide, with companies making large losses and large profits in each year examined, as shown in Table 6.4 above.

6.2.6 The table below reports the uplift applied to Wonga's accounting capital employed under each MEA approach[48]. As set out earlier in this section, the uplifts for each approach are applied as a

[47] Amounts owed *to* group Companies are included as debt and also netted off amounts owed *by* group companies from debt figures. Cash is not netted off from total debt on the basis that cash holdings are required for working capital reasons.

proportion of accounting capital employed. Therefore, whereas Wonga's capital employed is uplifted based on revenue under the MEA 2 approach, the uplift as a proportion of Wonga's accounting capital employed is applied to the industry.

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

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6.2.7 Based on applying the uplifts in Table 6.5 to industry capital employed (as per Table 6.3) Table 6.6 reports the revised estimate of capital employed for the industry (i.e. accounting capital employed plus intangibles).

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[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]

6.2.8 Finally, estimates of the economic profitability of the industry are based on profits in Table 6.2 and economic capital employed in Table 6.6.

[CONFIDENTIAL]

[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

[CONFIDENTIAL]

[48] Values are not reported for MEA 1b as AlixPartners is not able to calculate the assumed capitalisation and amortisation charge for the 'industry'. This is because access to management accounts is not available to enable the relevant costs to be determined for those companies. The analysis therefore effectively controls for the growth distortion, as explained in Sections 3 and 4.

6.3 CONCLUSIONS

6.3.1 After economic adjustments, the calculated ROCEs for individual companies range from **[CONFIDENTIAL]** (and **[CONFIDENTIAL]** for the industry) over 2007-12 for the MEA 1 approach. This range is much wider than is presented for Wonga, which would be expected given dispersion across firms in the industry, with some firms performing more strongly than others. As discussed earlier in Section 6, more than half of companies have made losses across the period, while others have posted large gains. Competition from new entrants (only 7 of the 19 firms included in the 2011 sample were operating in 2007) drives down supposedly high short-term returns over time. This is demonstrated by the **[CONFIDENTIAL]** exhibited by Wonga in Section 5's analysis.

7 CONCLUSION AND INTERPRETATION OF THESE RESULTS

7.1 INTERPRETATION OF THESE RESULTS

7.1.1 The results above suggest that:

(a) Economic returns for Wonga are **[CONFIDENTIAL]** the estimates based on simple accounting measures of ROCE (e.g. in 2012 the MEA 1 ROCE is **[CONFIDENTIAL]**, compared to an accounting ROCE of **[CONFIDENTIAL]**), reflecting the importance of intangible assets such as customer acquisition costs, staff training and knowledge of the customer base;

(b) Wonga's returns **[CONFIDENTIAL]**. Economic returns have **[CONFIDENTIAL]**.

(c) Wonga's returns **[CONFIDENTIAL]**

(d) Industry levels of returns are, on average, **[CONFIDENTIAL]** those of Wonga for the period for which data is available. Excluding 2007 and 2008, when Wonga made early losses, the industry average accounting ROCE varied between **[CONFIDENTIAL]** over the period 2009-12, compared to returns of **[CONFIDENTIAL]** achieved by Wonga. This difference between the ranges was also clear over the same period taking economic adjustments into account, with the aggregate industry making MEA 1 returns of **[CONFIDENTIAL]** while Wonga earned between **[CONFIDENTIAL]** under this approach.

(e) There is a wide range of performance across the sector **[CONFIDENTIAL]** on an accounting basis and **[CONFIDENTIAL]** under the MEA 1 approach, for example), with half of firms experiencing negative returns during at least some part of the CC's reference period.

7.1.2 Any assessment of how competition is working in the payday lending sector based on ROCE analysis must in any event be treated with a great deal of caution. As set out in Section 3, this is because:

(a) There are significant measurement challenges when estimating profitability in this sector, including the impact of low capital intensity, significant intangibles not recognised on the balance sheet as well as issues such as the remuneration model for start-ups and the risk of survivorship bias.

(b) Over the historic period, the industry and Wonga in particular have been in a rapid growth phase. However, from the perspective of long-term competitive pressures, the relevant metric to examine is steady-state profitability as the industry matures. In other words, these returns are not necessarily 'persistently' above the competitive benchmark.

7.1.3 In terms of how these results should be benchmarked:

(a) The 'start-up' and dynamic nature of the market makes a comparison between *ex post* returns and the *ex ante* cost of capital inappropriate unless the risks associated with the probability of unsuccessful outcomes is explicitly taken into account. Investors at the time the company was launched would have factored in a range of risks and outcomes when considering whether to invest and the returns Wonga has achieved appear to be consistent with a successful outcome having been achieved. However, going forward, unless innovation and outperformance continued, these returns are expected fall towards the cost of capital at the industry level. Wonga's forecasts suggest that **[CONFIDENTIAL]**

(b) If returns are to be compared with the cost of capital, the returns should be risk-adjusted. This would take into account various scenarios that could have materialised, including both their probability and their impact. However, this is outside the scope of this report

(c) AlixPartners understands from Wonga management involved in the early development of the company that early-stage venture capital (VC) investment often stipulates a required return on equity investment assuming the business is successful, rather than modelling all cash flow scenarios that may materialise. This is consistent with initial finance being relatively modest and then supplemented a few years later as the business matures (which is what happened with Wonga, where significant fund raising took place in 2009). While Wonga itself does not have direct evidence on such expectations, it notes the following:

(i) The CC cites ten-year annual IRR for funds in the survey of 15%, which appear to be based on surviving funds in the survey as at December 2012. However, even within these funds the pooled average masks a wide inter-decile range of over 50%, where for example the top-performing 10th percentile of post-1996 vintage funds earned annual IRR of 41.2%[49].

(ii) The CC notes from the survey that the since-inception IRR is the most appropriate metric to use when looking at private equity and venture capital

[49] *2012 British Private Equity and Venture Capital Association Performance Measurement Survey*, p .42.

performance, and observes that returns were around 15 per cent. However, this does not account for varying vintages within this average, with funds first drawn down in 1994 earning 34.3% annual IRR and funds first drawn down between 2001 and 2004 earning between 20.7% and 25.5% annually[50]. This is likely to reflect wider economic cycle factors but also illustrates the potential effect of survivorship bias, as the surviving funds over the period are likely to have the largest influence on the average.

(d) While there is no doubt that Wonga has become a successful enterprise, the CC must ensure that it adjusts for the risk of 'survivorship bias' in its assessment of Wonga's performance. This can be done by looking at the returns that venture capitalists require on their successful investments so as to deliver overall returns for their portfolio consistent with the high risks they bear.

(e) Moreover, the ROCE and ROE measures relied on by the CC suffer from significant drawbacks when applied to the payday sector. Wonga's business model has relatively low capital intensity, such that even relatively modest changes in parameters such as rate of loan growth, default rates etc. can have significant effects on outturn returns. For example, had Wonga's loan loss rate been **[CONFIDENTIAL]** (still better than some firms in the sector have achieved) rather than **[CONFIDENTIAL]** this would have had a dramatic impact on historical EBIT. In 2012, for example, such a change in default rates could have reduced EBIT from around **[CONFIDENTIAL]** (post-service charge adjustment, on the basis of Wonga's internal assessment of EBIT for a stand-alone UK entity) to just **[CONFIDENTIAL]**. Even a small change in the principal loss rate would have a dramatic impact on Wonga's profitability, with an increase from **[CONFIDENTIAL]** to **[CONFIDENTIAL]** resulting in a fall of over **[CONFIDENTIAL]** in EBIT, from **[CONFIDENTIAL]**, for example. The sensitivity of Wonga's EBIT to the principal loss rate is illustrated in the figure below.

[CONFIDENTIAL]

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(f) Therefore, a more reasonable benchmark is Wonga's outcome returns against those envisaged at the time of investment under a 'successful' scenario. Wonga's returns could

[50] 2012 BVCA survey, p.6.

also be benchmarked against successful VC backed investments to consider how exceptional or otherwise it is. AlixPartners notes that the CC refers to evidence from returns achieved by private equity and venture capital managed funds as a potential benchmark, including from the 2012 BVCA[51] performance measurement survey (CC profitability working paper §125). Wonga's comments on the CC's observations on this point are set out in further detail in Section 4 of their response to the working paper, but AlixPartners notes that there is a wide dispersion in the performance of VC funds, with **the most successful VC funds earning between 20% to 41% annual IRR**[52]. Such dispersion is consistent with the high risks and probability of failure associated with investing in start-ups and private equity.

7.1.4 Furthermore, the CC could consider the evolution of returns over time for other industries during and subsequent to transitional growth phases. This is likely to demonstrate that industries that currently earn 'normal' rates of profits may have earned profits in excess of the cost of capital during growth phases.

7.1.5 An alternative would be to compare returns performance with that of similarly successful start-ups financed by venture capital.

7.2 CONCLUSIONS

7.2.1 In light of the analysis set out above, it is not possible to conclude that the payday lending industry is making returns 'persistently' and 'substantially' above the cost of capital. This reflects the significant evidence of declining profitability in 2013, a trend which is anticipated to continue over the period to 2014 (and beyond). This, combined with the evidence of significant entry to the sector, evidence of increasing competition across payday operators, and wider competition between payday operators and providers of other forms of short-term credit, suggests an absence of any significant competitive concerns.

7.2.2 As discussed earlier in this report, there are also a number of issues related to the interpretation of these results, particularly the low capital intensity of payday lending and the start-up nature of the business. As a successful entrant, Wonga exhibits a 'survivorship bias' and it is therefore imperative that risk-adjusted returns are considered. Increasing regulatory and competitive pressures also present challenges for Wonga, with **[CONFIDENTIAL]**

[51] The British Private Equity and Venture Capital Association.
[52] Based on examining the range of returns for post-1996 vintage funds over ten years and vintages within since-reception returns. See 2012 BVCA survey p.6 and p.42, and Wonga's response to the CC's profitability working paper, for more detail.

8 APPENDICES

Appendix 1: Operating profits, payday lending companies, 2007-12

£m [CONFIDENTIAL]	**2007** [CONFIDENTIAL]	**2008** [CONFIDENTIAL]	**2009** [CONFIDENTIAL]	**2010** [CONFIDENTIAL]	**2011** [CONFIDENTIAL]	**2012** [CONFIDENTIAL]
Instant Cash Loans	13.3	19.9	26.9	32.5	34.3	34.4
MEM Consumer Finance*	(0.1)	3.0	13.7	17.8	25.6	25.6
Wage Day Advance	-	0.6	3.1	8.4	16.4	19.7
Express Finance (Bromley)	-	1.0	3.3	7.1	10.9	16.8
Think Finance (UK)*	-	-	0.6	0.3	(2.2)	(1.8)
The Loan Store Ltd*	-	-	-	(0.2)	1.2	2.9
Albemarle & Bond	8.2	12.3	16.2	20.7	21.7	22.6
Cheque Centres*	(6.7)	(4.1)	1.8	7.4	(0.7)	(5.3)
Cash Converters	-	-	1.1	1.0	0.6	1.6
TxtLoan Ltd	-	-	-	0.1	2.2	8.5
National Cash Advance Ltd	-	(2.1)	(2.4)	(1.8)	-	-
Lending Stream Ltd*	-	-	(0.3)	(3.6)	(3.6)	(1.6)
CFO Lending Ltd	-	-	-	(0.1)	0.4	1.1
Haymarket lending	-	-	-	-	0.9	2.0
Kesef Ltd*	-	-	-	0.0	(0.2)	(0.2)
SRC Transatlantic*	-	-	-	(0.7)	(5.7)	(9.3)
Early Payday Loan	0.1	0.1	0.3	0.3	0.3	0.4
Speed-e-Loans	-	-	-	(0.7)	(1.5)	-
H & T Group	10.0	13.3	21.0	28.6	24.6	18.1

Source: Company accounts and AlixPartners analysis.

Note: Companies marked with an asterisk were not included in the 2012 sample analysed in Wonga's response to the WP, but AlixPartners has since obtained updated financial information for these companies, for the purposes of conducting the analysis presented in this report. MEM Consumer Finance reported results for the 18-month period to June 2012; the values for this period were scaled and used only for 2011 in the analysis presented in the WP response but have, in this report, been scaled and presented as the figures for both 2011 and 2012.

Appendix 2: Average of year capital employed, payday lending companies, 2007-12

£m [CONFIDENTIAL]	2007 [CONFIDENTIAL]	2008 [CONFIDENTIAL]	2009 [CONFIDENTIAL]	2010 [CONFIDENTIAL]	2011 [CONFIDENTIAL]	2012 [CONFIDENTIAL]
Instant Cash Loans	39.4	51.4	69.9	86.5	106.2	142.5
MEM Consumer Finance	2.9	9.7	16.5	23.8	32.1	35.1
Wage Day Advance	-	0.9	1.8	5.2	13.1	21.4
Express Finance (Bromley)	-	1.0	3.1	7.4	21.6	20.2
Think Finance (UK)	-	-	0.6	0.7	1.9	1.0
The Loan Store Ltd	-	-	-	0.3	2.1	4.7
Albemarle & Bond	45.4	67.5	83.9	85.6	97.7	116.0
Cheque Centres	5.9	9.0	12.0	17.8	24.2	31.4
Cash Converters	-	-	5.4	8.4	15.0	22.8
TxtLoan Ltd	-	-	-	0.6	2.7	9.9
National Cash Advance Ltd	-	4.3	4.5	5.6	-	-
Lending Stream Ltd	-	-	0.8	3.1	9.0	7.4
CFO Lending Ltd	-	-	-	0.0	1.2	2.6
Haymarket lending	-	-	-	-	3.3	9.0
Kesef Ltd	-	-	-	0.2	0.2	0.1
SRC Transatlantic	-	-	-	1.6	4.2	10.7
Early Payday Loan	0.2	0.3	0.3	0.3	0.3	0.5
Speed-e-Loans	-	-	-	0.7	0.4	-
H & T Group	59.0	68.1	81.8	91.9	102.0	116.0

Source: Company accounts and AlixPartners analysis.

Note: Please see the note to Appendix 1 regarding additional data for 2012 relative to that presented in Wonga's response to the WP.

Appendix 3: ROCE, payday lending companies, 2007-12

% [CONFIDENTIAL]	2007 [CONFIDENTIAL]	2008 [CONFIDENTIAL]	2009 [CONFIDENTIAL]	2010 [CONFIDENTIAL]	2011 [CONFIDENTIAL]	2012 [CONFIDENTIAL]
Instant Cash Loans	33.6	38.7	38.5	37.6	32.3	24.1
MEM Consumer Finance	(2.2)	31.2	82.9	74.8	79.9	-
Wage Day Advance	-	71.6	169.4	162.3	124.7	92.1
Express Finance (Bromley)	-	108.3	105.4	96.2	86.4	83.5
Think Finance (UK)	-	-	95.7	36.1	(113.3)	(188.7)
The Loan Store Ltd	-	-	-	(70.4)	54.2	63.1
Albemarle & Bond	17.9	18.2	19.3	24.1	22.2	19.5
Cheque Centres	(113.6)	(45.9)	14.6	41.3	(2.9)	(17.0)
Cash Converters	-	-	20.7	11.7	3.8	7.0
TxtLoan Ltd	-	-	-	8.7	80.9	85.9
National Cash Advance Ltd	-	(49.4)	(54.1)	(31.3)	-	-
Lending Stream Ltd	-	-	(42.8)	(116.0)	(40.0)	(21.1)
CFO Lending Ltd	-	-	-	(286.1)	29.9	42.2
Haymarket lending	-	-	-	-	26.6	22.6
Kesef Ltd	-	-	-	(26.3)	(125.6)	(193.2)
SRC Transatlantic	-	-	-	(48.2)	(134.9)	(86.7)
Early Payday Loan	38.7	35.8	86.1	83.9	77.2	77.0
Speed-e-Loans	-	-	-	(101.8)	(332.2)	-
H & T Group	16.9	19.5	25.7	31.2	24.1	15.6

Source: Company accounts and AlixPartners analysis.

Appendix 4: Market value of equity, publicly listed payday lending companies, 2007-12

Millions, home currency	Currency	2007	2008	2009	2010	2011	2012
Advance America	$	782.9	114.9	338.4	344.5	549.6	-
EZ CORP	$	556.3	779.1	664.6	986.3	1425.3	1173.9
First Cash Financial	$	451.0	557.4	661.9	939.1	1055.4	1421.2
QC Holdings	$	213.3	66.4	83.7	63.8	68.3	55.7
Cash America	$	943.3	793.6	1024.4	1092.2	1365.6	1152.2
DFC Global Corp	$	-	366.1	332.2	481.5	940.8	810.3
Albemarle & Bond	£	105.1	96.5	123.8	125.6	204.0	134.7
H&T Group	£	72.3	57.4	107.0	122.4	115.0	101.4
Cash Converters	AUD $	168.2	55.6	99.6	208.9	275.3	244.9
Thorn Group	AUD $	95.5	70.4	63.1	145.0	284.4	229.8
Money3	AUD $	24.5	13.3	12.2	15.9	17.9	17.8
Cash Store Financial	CAD $	95.0	82.1	146.1	280.4	222.7	107.2

Source: Company accounts and AlixPartners analysis.

Appendix 5: Book value of equity, publicly listed payday lending companies, 2007-12

Millions, home currency	Currency	2007	2008	2009	2010	2011	2012
Advance America	$	250.3	171.3	212.6	235.0	288.6	-
EZ CORP	$	215.9	273.1	415.7	519.4	664.2	834.8
First Cash Financial	$	201.2	154.5	212.4	298.0	315.4	352.4
QC Holdings	$	52.2	49.4	65.6	71.5	79.2	82.3
Cash America	$	496.6	575.0	683.2	802.7	907.6	990.6
DFC Global Corp	$	-	193.3	209.1	218.3	422.9	460.2
Albemarle & Bond	£	26.3	44.3	51.5	59.6	71.5	80.3
H&T Group	£	30.3	35.7	47.1	61.7	77.3	86.8
Cash Converters	AUD $	68.0	74.0	82.5	157.1	169.6	186.6
Thorn Group	AUD $	54.4	62.3	69.3	81.8	95.0	140.2
Money3	AUD $	22.4	22.8	24.1	25.5	30.5	33.4
Cash Store Financial	CAD $	77.6	71.2	65.9	83.4	82.3	33.5

Source: Company accounts and AlixPartners analysis.

Appendix 6: Book value of debt, publicly listed payday lending companies, 2007-12

Millions, home currency	Currency	2007	2008	2009	2010	2011	2012
Advance America	$	221.4	275.8	233.5	196.6	197.3	-
EZ CORP	$	35.3	35.7	125.4	156.4	156.5	437.3
First Cash Financial	$	110.9	110.9	43.8	44.4	41.7	155.3
QC Holdings	$	97.4	93.6	82.5	66.5	74.0	49.4
Cash America	$	408.0	606.8	586.5	624.5	766.7	827.6
DFC Global Corp	$	-	749.6	712.4	996.3	1238.6	1306.3
Albemarle & Bond	£	27.4	46.7	41.8	39.8	47.2	54.9
H&T Group	£	38.4	42.3	5.8	45.4	47.3	43.1
Cash Converters	AUD $	12.8	25.2	32.3	33.0	54.1	76.1
Thorn Group	AUD $	30.4	29.2	33.5	36.2	76.8	45.1
Money3	AUD $	3.4	5.4	1.8	2.9	3.8	4.0
Cash Store Financial	CAD $	14.3	10.0	17.9	31.7	41.0	168.9

Source: Company accounts and AlixPartners analysis.

Appendix 7: Market-to-book ratios, publicly listed payday lending companies, 2007-12

	2007	2008	2009	2010	2011	2012
Advance America	2.1	0.9	1.3	1.3	1.5	-
EZ CORP	2.4	2.6	1.5	1.7	1.9	1.3
First Cash Financial	1.8	2.5	2.8	2.9	3.1	3.1
QC Holdings	2.1	1.1	1.1	0.9	0.9	0.8
Cash America	1.5	1.2	1.3	1.2	1.3	1.1
DFC Global Corp	-	1.2	1.1	1.2	1.3	1.2
Albemarle & Bond	2.5	1.6	1.8	1.7	2.1	1.4
H&T Group	1.6	1.3	1.6	1.6	1.3	1.1
Cash Converters	2.2	0.8	1.1	1.3	1.5	1.2
Thorn Group	1.5	1.1	0.9	1.5	2.1	1.5
Money3	1.1	0.7	0.5	0.7	0.6	0.6
Cash Store Financial	1.2	1.1	2.0	2.7	2.1	1.4

Source: AlixPartners analysis.

Appendix 8: AlixPartners analysis of capital intensity

Table A8.1 below reports AlixPartners' estimates of capital intensity for Wonga and some of the industries previously reviewed by the CC. AlixPartners notes the following:

(a) AlixPartners considers that the *Home Credit* inquiry is probably the most comparable to online payday lending from a profitability standpoint followed by other lending markets such as the *Store Cards* and *SME Banking* inquiries.

(b) Analysis reveals that capital intensity for the leading Home Credit provider was around 210%, which compares to around **[CONFIDENTIAL]** for Wonga. This is arguably the most relevant comparison in Table A8.1 as capital is defined in the same way for both Wonga and Provident (i.e. debt plus equity and not just equity which was the capital definition in the *Store Card* and *SME* inquiries)[53].

(c) There is a wide range in terms of capital intensity for two leading Store Card companies and this may in part reflect foreign ownership of these companies and decisions on repatriation of equity[54].

(d) If GE Capital is disregarded (where this issue appears to be most relevant) and the analysis focuses on Creation Financial Services Limited as the estimate of capital intensity for

[53] Calculations for Provident are based on implying the level of capital employed in the UK Home Credit part of the business as the CC redacted the relevant data in its reports.

Store Cards, using the same definition of capital as for Provident and Wonga (i.e. debt plus equity) capital intensity would increase to about 313%[55].

(e) In other words, on a comparable basis, Wonga appears to be **[CONFIDENTIAL]** times less capital intensive than leading Home Credit and Store Card providers at the time those markets were reviewed by the CC.

(f) For the other inquiries in which data could readily be sourced, ratios were found to be in the range of 52% to 187%[56]. In other words, capital intensity is lower than these industries as well.

(g) Relevant data could not be sourced for *Audit, Mobile Termination Charges* and *Domestic LPG* and these are excluded these from the analysis. These are arguably much less comparable to online payday lending than the other industries reviewed here.

Table A8.1: Ratios of capital intensity (capital/revenue)

[CONFIDENTIAL]	**Capital Intensity** [CONFIDENTIAL]
Provident (Home Credit Inquiry 2006)	209.7%
GE Capital (Store Card Inquiry 2006)	326.2%
Creation Financial Services (Store Card Inquiry 2006)	53.9%
Four largest clearing groups (SME Banking Inquiry 2002)	100.7%
PPI Inquiry 2009	12%
Yell (CDAS Inquiry 2006)	187.4%
Sky (Movies on Pay TV Inquiry 2012)	52.2%
Domestic & General (Extended Warranties Inquiry 2003)	113.6%

Source: AlixPartners analysis.

[55] Creation Financial also provides credit cards but have used the company's annual accounts nonetheless as some of the data required for the store card business was redacted in the CC's reports.

[56] Note: the 12% for *PPI* was used by the CC to estimate economic capital in its profitability model (i.e. capital was assumed to comprise 12% of revenue), and therefore caution should be exercised in directly comparing this to the other ratios.

Appendix 9: Information used in this report (data pertains to Wonga unless specified otherwise)

Information provided	Years
Management accounts	2007-11
Financial information for payday lending companies (Appendix 1-3)	2007-12
Financial information for publicly listed companies (Appendix 4-6)	2007-12
CC financial template	2008-15
Revised allocation schedule – Balance sheet (actuals)	2007-13
Revised allocation schedule – P&L (actuals)	2008-13
Revised allocation schedule (forecast)	2014
Marketing costs	2011-12
Staff training costs	2011-12
Customer lifetime data	2007-12

Source: Wonga.