

Evaluating alternative market models for Tax-Free Childcare vouchers

Final report for HM Treasury

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1. Executive Summary

This report, prepared for HM Treasury, sets out our findings and recommendations regarding the appropriate design of the market for Tax-Free Childcare vouchers. In summary, our view is that - on balance - an open market model is most likely to deliver the greatest net benefits to parents and the taxpayer.

A summary of our report is as follows:

- (i) HM Treasury commissioned Economic Insight to provide advice and analysis regarding the design of the market for Tax-Free Childcare vouchers.
- (ii) Government is considering a range of market model designs, but two key options are: *the open market model* (where there would be no restrictions on market entry); and *the closed market model* (in which Government would run a competition to select a limited number of voucher suppliers).
- (iii) The choice of model turns on the scope for competition in the market. If one believes effective competition would develop, an open market model is likely to deliver superior outcomes for parents and taxpayers. If one believes the scope for competition is limited, the opposite will be true.
- (iv) Based on our analysis, we find that a range of evidence is supportive of there being significant scope for competition within the Tax-Free Childcare voucher market and so we recommend an open market model.

Introduction and context

At Budget 2013 the Government announced the introduction of Tax-Free Childcare (TFC) for working families. This significant new scheme is intended to assist working families by giving support equivalent to basic rate tax relief on money spent on childcare.

Under TFC, parents will register with a voucher provider and open an online account. The Government will then make 'top up' payments into the parents' account up to 20% of the total value of childcare costs (subject to an annual limit of a £1,200 contribution for each child). TFC replaces the existing Employer Supported Childcare (ESC) scheme, and will be phased in from autumn 2015.

A key issue in relation to the deployment of TFC is how the new market for the supply of vouchers should be designed. In particular, Government needs to consider how best the new voucher market should be designed in order to ensure that competition between suppliers functions effectively and to the benefit of working parents.

At this time Government is considering a range of potential market model designs for TFC vouchers – although two key broad options are:

- » A "direct contract" approach, whereby Government would run a competition amongst firms for the right to supply TFC vouchers. Under this model there would, therefore, be a Government limited number of providers. We refer to this as the "closed market model."
- » An open model, under which there is no direct restriction on market entry, other than consumer protection safeguards. We refer to this as the "open market model."

In evaluating the appropriate market model, it is important to note that the new TFC scheme differs from ESC in a number of respects – not least because under the old scheme, existing voucher providers primarily interfaced with employers (often as part of employer based employee benefit schemes); whereas under TFC, voucher providers will need to interact more directly with parents. However, it is equally important to note that: (i) a number of features of the new market will be similar to the existing voucher market; and (ii) not all of the changes are relevant to the assessment of the appropriate market model.

In the above context, HM Treasury commissioned Economic Insight to undertake an analysis of the relative pros and cons of the closed and open market models; and subsequently to provide advice as to which market model is likely to be most appropriate. In particular, our focus is on understanding which approach will best deliver effective competition that benefits parents and Government.

The 'in principle' pros and cons of open and closed market models

There are a range of 'in principle' costs and benefits to both the open and closed market models – and the key issue to understand is that the balance of these fundamentally rests on: (i) what one believes about the overall scope for competition in an open market; which itself depends on: (ii) the underlying demand and supply side characteristics of the market.

In headline terms, if one believes that there is substantial scope for strong, effective competition in the market, then it is likely that the open market model will yield greater net benefits to parents and taxpayers than the closed market model. Conversely, if one believes that there are likely to be significant impediments to competition, the opposite is likely to be true.

The reasons an *open market model* might be preferred, in the event of there being <u>scope for effective competition</u> are:

- » It is well established in economic theory (and regulatory best practice) that open market competition has the potential to yield greater dynamic efficiencies and product / service innovation. The intuition for this is straightforward: that intra-firm rivalry provides a strong commercial incentive for firms to continually re-invest in driving down cost and providing the services that customers want.
- » Related to the above, in an open market model, competition has the potential to reveal the 'true' efficient cost of supply over time, and the nature of services customers want over time. In contrast, under a closed market model the Government is, to an extent, effectively second guessing: (i) what customers want today and in the future; and (ii) the future efficient costs of supply (as even if a Government run competition 'for the market' revealed currently efficient costs of supplying vouchers, one would not know whether these remained efficient absent strong competitive rivalry 'in the market').
- » There are also transactional costs associated with any Government managed procurement or bidding process under a closed market model; some of which would, by definition, be avoided under the open market model.

The reasons a *closed market model* might be preferred, in the event of there being <u>limited scope for competition</u> are:

» Where the scope for product differentiation is limited, the potential 'dynamic' benefits of an open market model may be less relevant.

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- » Related to the above, where there are large economies of scale, a closed market model may result in a more efficient outcome. This is because, in such instances, one might expect there to be only limited competition under the open market model.
- » Government may be better able to *guarantee* that all customers would be served by suppliers.
- » Finally, where there is need to make large sunk investments, firms are exposed to the risk of their assets being stranded. In such cases, a closed market model could mitigate the risk by providing security that the limited number of players in the market can earn a return on the investment required to enter. In an open market, however, there is no such mitigating factor and thus this risk could stunt the scope for competition and the benefits it would bring (although in the current case of course, existing voucher suppliers will themselves have made sunk investments, a proportion of which may effectively be written off were some of those firms to exit under a closed market model).



"If one expects that, absent any direct intervention, competition in the market for TFC vouchers would function effectively then the open market model would be preferred."

At the heart of determining which model is most appropriate, therefore, lies the question of 'how much' competition we might naturally expect there to be in the TFC voucher market, absent any intervention from Government. In a world where we expect competition to be strong, then the 'in principle' benefits of the open market model would be realised, and thus this would be net beneficial relative to the closed market model - and viceversa.

In practice, of course, there is a spectrum of market models that sit between a 'single provider closed market' and the open market model described here. For example, a closed market could have more than one provider and so could offer *some* degree of choice for customers. Therefore, the range of likely costs and benefits described above depend on 'how closed' a closed market model really is - it is not a binary choice.

Nevertheless, within this spectrum there remains the broad trade-offs described here. For example, allowing greater choice in a closed market may itself be costly if there are strong economies of scale. Put simply, the more one believes that it is possible to replicate the benefits of an open market model by increasing the number of firms

supplying under a closed market model, the more the rationale for a closed market model in the first place is, ultimately, undermined.

Our methodology and approach

Our starting point was to develop a clear conceptual framework, which we use to evaluate a wide range of evidence and analysis to inform our recommendations as to the appropriate market model. Our framework reflects our description of the 'in principle' benefits of the open and closed models – in the sense that, ultimately, the answer to the question of which is most appropriate rests on determining the likely scope for competition within an open market. Specifically, our framework rests on the following principles:

- » That if one expects that, absent any direct intervention, competition in the market for TFC vouchers would function effectively (i.e. one would naturally expect there to be effective competition) then the open market model would be preferred.
- » That if there were impediments to the functioning of competition in a free market, one would need to consider whether there are any policy tools that would mitigate those impediments in a cost-effective manner in which case the market model would still be preferred subject to those policy tools being implemented.
- » That if there are no cost effective tools for addressing any identified impediments to free competition, a closed market model would tend to be preferred.

Within our framework described above we have considered a wide range of evidence and information. This has included:

- economic theory, academic literature, and economics first principles;
- competition law and regulatory precedent;
- survey evidence from HM Treasury;
- a range of financial data relating to existing voucher providers under the ESC scheme;
- analyses of other comparator firms and markets;
- minimum efficient scale modelling; and
- discussions with existing voucher providers.

An inherent limitation to our study is that the market for TFC vouchers does not yet exist. Consequently, in evaluating the above evidence using our framework, we are seeking to:

- draw inferences about what we think the likely characteristics of the market might be; and
- given those characteristics, consider the implications for the likely effectiveness of competition.

In seeking to make inferences about the likely characteristics of the TFC voucher market, we believe that an analysis of the existing ESC voucher market represents a key piece of evidence. This is because: (i) whilst the new market will be more similar to a B2C rather than B2B environment, in many important respects the activities undertaken by voucher providers will be unchanged; and (ii) as existing voucher providers are well-placed to enter the new market, understanding the commercial incentives for them to do so is essential to understanding the overall scope for competition.

Of course, there will be important differences between the provision of ESC and TFC vouchers. As a result, there may be some limitations as to what inferences should be drawn from the existing market. To reflect this, therefore, in our analysis we have:

- » Spoken to existing providers to ask them what they might do differently under the new market and what this might imply with respect to both entry and ongoing costs of supply.
- When making inferences based on financial analyses of existing suppliers, we have incorporated the potential for changes under the new market.
- » Analysed other potential comparator firms and industries.
- » We also give consideration to whether there may be green-field entry and other forms of entry models (taking into account whether separate segments could emerge for B2B and B2C within the TFC voucher market).

Finally, our methodology also incorporates our assessment of the potential implications of any regulatory measures used to provide consumer protection.

Demand side analysis

We have considered the extent to which parents and employers will be able and willing to choose a provider that best meets their needs. That is, to engage fully in the market and drive competition by 'voting with their feet'.

In particular, we have considered the extent to which employers and parents will be able to *access* the information they need to make good choices, *assess* the information and *act* on it.

Our analysis is primarily qualitative and is based on our understanding of the likely characteristics of the TFC, survey and other evidence provided to us by HMT, discussions with existing providers and comparisons to other service sectors where UK competition authorities have found competition problems in the past.

In summary we have found that:

- » First, there are numerous triggers that will encourage employers and parents to access the information they need to choose a provider. The registration and the quarterly eligibility verification processes are examples of these triggers. In addition, our discussions with providers and evidence from other markets suggests that meaningful service differentiation will emerge between providers, and so provide incentives for employers and parents to shop around.
- » Second, it is likely that there will be sources of information that customers can draw on to identify their options. There is already evidence of third party information providers showing an interest in childcare voucher accounts (both under ESC and TFC). Also, HMT's survey evidence suggests that employers will, to varying degrees, help parents engage with the service. There are arguments for and against the view that employers' interests will be aligned with parents' interests.
- » Third, parents and (to a lesser extent) employers may find it difficult to assess the quality of service from different voucher providers prior to using them. However, some of these difficulties may be mitigated by the information made available by third-parties noted above (or indeed, could be mitigated by Government making information available, as described below). Moreover, suppliers would seem to have a strong financial incentive to differentiate themselves to win customers in what is expected to be a relatively high churn market.
- » Fourth, there may be some potential impediments to employers and parents acting on the information they gather by switching to the voucher provider that offers the best value, but these impediments are not as acute as those seen in other financial services.
 Moreover, the competition concerns associated with these switching costs are, to some extent, moderated by the competition that is likely to emerge for the significant proportion of 'newto-market' customers.

Therefore, we think that there are good reasons to believe that the demand-side of the market will work well for consumers.

We have, however, identified a number of risks and uncertainties which should be considered. These are:

The risk that parents already associated with a voucher provider via ESC do not actively 'shop around' and instead 'roll-over' their existing arrangements.

- » The risk that parents find it hard to compare the more subtle aspects of voucher services, which could act as a deterrent to shopping around.
- The risk that parents lose unspent top-ups from previous entitlement periods if they wish to transfer funds and/or the time cost associated with mitigating this risk, which could act as a deterrent to shopping around.
- » The uncertainty associated with the process and responsibilities in the situation where employers switch in order to offer their employees a different voucher provider.

To address these issues, we think that Government should consider the following options as it develops the models.

- » First, Government should consider whether the registration and reregistration process could be used to capture useful information for new-tomarket parents, such as a simple 'rate your provider out of five' score that could then be disseminated to parents and other stakeholders to provide information transparency and support switching.
- » Second, HMT could consider sending a 'wakeup' letter to parents that are currently enrolled on an ESC scheme. The letter could notify them of their right to change childcare voucher provider and also their right to use a different provider to the one that their employer selects.
- » Third, HMT could consider whether anything can be done to help limit or eliminate the risk that parents would lose actual or entitled topups if they decide to switch to another employer.
- » Fourth, HMT could consider introducing a switching code-of-conduct, which sets out the responsibilities and timescales that employers and the in-going and out-going voucher providers should adhere to.

Supply side analysis

Consistent with our overall framework, we have undertaken an analysis of the scope for competition from a 'supply side' perspective (i.e. the ability of firms to enter and expand in the market, and the nature of intra-firm rivalry). Here we have evaluated a range of evidence to determine whether there may be any impediments to supply side competition, where three key considerations are:

» Whether there might be barriers to entry, particularly in the form of 'sunk' investment

- costs (i.e. investments that could not be recovered in the event of a firm choosing to exit).
- » Relatedly, whether there may be issues of 'access to finance' required in order to make the investments to support entry.
- » Thirdly, whether there may be issues of 'minimum efficient scale' that naturally limit the number of competitors that could plausibly be supported by the market.

The key analysis and evidence we have undertaken and developed to inform the above three issues is as follows.

Firstly, we consider that firms are likely to have to incur some up-front sunk investment costs in order to enter the new market. These will most likely relate to IT infrastructure and marketing and brand (the former to support systems interactions with HMRC and Government, the latter to support the need to develop a consumer facing brand).

Secondly, however, in practice a range of evidence suggests that the *extent* of these up-front investments is likely to be limited – and therefore the market is likely to have low entry barriers. Key evidence that has led us to take this view is as follows:

- » The existing voucher market has very low capital intensity, suggesting that voucher provision is a low capital intensive activity – especially compared with other industries.
- Existing suppliers only made modest investments in order to enter the ESC voucher market. Consequently, even if existing suppliers had to make new investments equal to 100% of those already made, that investment would still be small in scale in relative terms.
- We asked existing suppliers to provide indicative views of the capex spend they envisage having to incur in order to enter. Though subject to uncertainty, their responses were consistent with the empirical evidence we developed. Therefore, even if the existing market is not indicative of the capital intensity of the new market, actual potential entrants into the new market are not anticipating making substantial investments in order to enter. Critically, this captures the assessment of existing suppliers that marketing costs would be higher in the new market (and thus captures the fact that they would be operating in a more B2C environment).
- » To reflect the fact that the new market will be closer to a B2C, rather than B2B, environment, we examined the capital intensity of

mainstream (i.e. non childcare) voucher and gift card providers with substantial consumer facing brands. These firms also have a relatively low level of capital intensity (even if brand expenditure is capitalised).

» Relatedly, the incremental capital investment specifically relating to B2C does not appear to be sufficiently material to suggest that: (i) this in itself will be a barrier to entry; or (ii) that a clear, distinct B2C segment will emerge that will be less well served by suppliers. That is not to say, however, that there will not in practice be a range of viable business models, with some firms choosing to focus primarily on B2B, some on B2C, and others on a mix of both.



Thirdly, notwithstanding the fact that the evidence suggests that only modest entry investment is likely to be required, we examined whether suppliers would likely be able to access finance should they need to. We found no cause for concern in this regard.

Fourthly we examined the scope for economies of scale and minimum efficient scale within the new

market. Here we find that: (i) empirical evidence is not consistent with there being material scale economies; and (ii) even if fixed costs are more prevalent than in the existing ESC market, analysis suggests that there would still be sufficient players to ensure there is effective competition. Here the key evidence that has led us to this view is:

- » Correlations of 'scale' and 'profit' find no positive relationship for existing suppliers (one would expect a strong positive correlation in the event of there being significant economies of scale).
- » Minimum efficient scale modelling, which suggests that - even with materially higher costs of goods sold than have been incurred by suppliers historically - there is likely to be a viable, profitable supply base. We also specifically considered entry into the B2C segment in isolation and found that, even allowing for increased marketing and brand investment, this conclusion holds.

Fifthly, we gave consideration to the scope for alternative entry models, including green field entry. Given the low barriers to entry and the range of potential models that green field entrants

could adopt, we think that this is a possibility. Perhaps more likely is for existing voucher providers to 'partner' with firms with an existing B2C brand and presence. However, our supply-side conclusions do not rest on such forms of entry succeeding in practice, given the large number of existing players that would seem to be well-placed to participate.

Finally, we took into account the potential regulatory tools that could be put in place to ensure that there are safeguards in place with respect to parents' funds.

In conclusion, we find that on the supply side, the TFC voucher market is likely to be characterised by low entry barriers, and relatively low minimum efficient scale. Consequently, the supply side analysis is strongly supportive of an open market model being the one that would deliver the greatest benefits for parents and government.

We have, however, identified a number of risks, which Government should take into account when taking forward its market model design. In particular:

- » The risk that Government drives unexpectedly high investment costs, where the primary risk is on the IT side, associated with how voucher providers' systems will interface with HMRC.
- The risk that there could be 'time and resource' costs that existing voucher suppliers would incur in rearranging their businesses to migrate to the new market.
- » The risk that scale economies will be more significant than is the case in the current ESC market, and so % fee rates for voucher providers may be too low to attract sufficient entry to secure effective competition (although we consider this to be low risk).
- » The risk that the vertically integrated nature of certain providers could act to 'stunt' competition to the detriment of consumers (we also consider this to be low risk).

We do not consider any of the above risks to be so significant that they would stop the open market model from working well. However, we think that for the open market model to work most effectively, Government should be mindful of these issues and should consider the following mitigating steps:

- In designing the IT infrastructure and platform to support eligibility verification, Government should work closely with existing suppliers to ensure that it does not inadvertently drive substantial investment costs
- Government should take steps to mitigate any market transition costs for existing suppliers and provide certainty as early as

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possible in the policy design process to help support commercial decision making.

We consider scale economies and vertical integration related risks to be sufficiently low that they do not merit mitigating steps. However, were Government nonetheless concerned regarding these issues, it could consider:

- Regarding scale economies: it could either err on the 'high' side with respect to % fee rates to voucher providers, or consider 'twopart tariff' type pricing structures to aid in fixed cost recovery.
- Regarding vertical integration issues: this could be mitigated by mandating the common acceptance of all vouchers, say through a 'Government approval' scheme.

In summary, from a supply side perspective, we believe that the evidence and analysis we have reviewed and undertaken is consistent with the open market model being the most appropriate option. However, the identified risks should be considered further and it may be necessary to implement some of the mitigation actions outlined above.

Our key findings and recommendations

An open market model offers a number of advantages over a closed market model, and it should be chosen by Government unless there is reason to believe that the demand-side or supplyside of such a market would not work well.

There are good reasons to believe that the demand-side and supply-side of an open market would function effectively, and so we think that Government should pursue this option.

In doing so, there are some risks and uncertainties associated with the new arrangements, which Government can and should address with the assistance of stakeholders.



2. Introduction and context

HM Treasury commissioned Economic Insight to advise it on the appropriate design of the market for Tax-Free Childcare vouchers. This report sets out our findings and recommendations.

In this introductory section we set out:

- (i) **The overall context to our work,** including a summary of Government's proposals for Tax-Free Childcare vouchers.
- (ii) A description of how the existing Employer
 Supported Childcare voucher scheme works –
 and an overview of the key changes that are
 likely to occur under Tax-Free Childcare
 relative to Employer Supported Childcare.
- (iii) A summary of the potential market models being considered for Tax-Free Childcare, specifically the 'closed market model' and the 'open market model' – and a discussion of the 'in principle' benefits of each.
- (iv) A description of the methodology and approach we have taken to evaluating the appropriateness of alternative market models.

2.1. Introduction and context

At Budget 2013 the Government announced the introduction of Tax-Free Childcare (TFC) for working families. This significant new scheme is intended to assist working families by giving support equivalent to basic rate tax relief on money spent on childcare.

Under TFC, parents will register with a voucher provider and open an online account. The Government will then make 'top up' payments into the parents' account up to 20% of the total value of childcare costs (subject to an annual limit of a £1,200 contribution for each child).

The new TFC policy will replace the existing ESC scheme, which will be phased out (although existing members of ESC will be able to choose whether to remain on their current scheme, or move to TFC). The TFC will be delivered by HMRC and will be made available to 2.5 million working families in the UK (more than the current ESC scheme). The new scheme will be introduced in phases from autumn 2015.

A key issue in relation to the deployment of TFC is how the new market for the supply of vouchers should be designed. Importantly, the new TFC scheme differs from ESC in a number of respects – not least because under ESC, existing voucher providers primarily interface with employers (often as part of employer based employee benefit schemes); whereas under TFC voucher providers will increasingly need to interact directly with parents. Consequently, Government needs to consider how best to design the new voucher market in order to ensure that competition between suppliers functions effectively and to the benefit of working parents.

Figure 1 Illustration of voucher provision under ESC

Vouchers paid for through parent salary sacrifice.

Provide vouchers (or package of employee benefits) to employers. Fees typically agreed directly and paid from employer's NIC saving. Providers also generate revenues from the interest on voucher fund balances (and from ancillary services such as operating nurseries).

Voucher providers

Administer voucher accounts for parents.

Pay childcare provider from voucher account funds.

Childcare provider

At this time, Government is considering a range of potential market model designs for TFC vouchers – although two key broad options are:

- » A "direct contract" approach, whereby Government would run a competition amongst firms for the right to supply TFC vouchers. Under this model there would, therefore be a Government limited number of providers. We refer to this as the "closed market model."
- » An open model, under which there is no direct restriction on market entry, other than consumer protection safeguards. We refer to this as the "open market model."

In the above context, HM Treasury commissioned Economic Insight to undertake an analysis of the relative pros and cons of the closed and open market models; and subsequently to provide advice as to which market model is likely to be most appropriate. In particular, our focus is on understanding which approach will best deliver effective competition that benefits parents and Government.

In the remainder of this introductory section we set out:

- how the existing ESC scheme works;
- the details of the specific market models under consideration by the Government;
- the key changes relative to ESC and the implications of these;
- the 'in principle' relative merits of open and closed market models; and
- a description of our methodology and approach to undertaking the work.

2.2. How the existing ESC scheme works

In order to consider the potential pros and cons of alternative market models for TFC voucher provision, it is helpful to understand the context of how voucher provision currently occurs under ESC.

The figure (left) illustrates how childcare vouchers are currently provided under the employer based scheme. Effectively, voucher providers manage accounts on behalf of employers, who offer childcare schemes to their employees, often as part of a wider package of employee benefits.

The voucher providers earn fees in return for their service, which are negotiated directly with employers and are typically paid for out of the national insurance contribution (NICS) saving that employers benefit from as a result of offering the scheme. For parents who sign up to the ESC, the cost of their voucher is automatically deducted out of their salary.

Voucher providers then administrate the employer schemes, managing the voucher accounts on behalf of employers and parents. They manage both the flows of payments into the accounts from employers, and the payments out to the childcare providers – who ultimately provide childcare to parents.

2.3. Key changes relative to ESC and implications

As the precise model for implementing TFC vouchers has yet to be determined, there is some uncertainty as to how exactly it might differ from the existing ESC market. However, it is clear that, in some important respects, the roles of market participants will be different.

In particular, at present (and as shown in the previous figure) voucher providers primarily interact with employers in the context of voucher provision being managed through employer based schemes. Therefore, voucher providers today may largely consider themselves to be business-to-business (B2B) providers. Under TFC vouchers, however, clearly providers will need to interact more directly with parents, both in terms of marketing and advertising (as under TFC parents, rather than employers, may be regarded as the primary customer from a voucher provider's perspective) but also in terms of account management.

The above means that the business models of voucher providers under TFC may differ from those that prevail under ESC in a number of areas. In particular:

- » Advertising As under ESC, employers are often deeply engaged in the promotion of schemes, voucher providers' marketing and advertising efforts are primarily focused on employers. Under TFC however, voucher providers will need to build brands that are end-customer (i.e. parent) focused. This change is likely to mean that providers incur increased advertising costs under TFC relative to ESC, reflecting the fact that the former is more like a B2C, rather than B2B, environment. This increased advertising spend could be characterised as a form of up-front investment necessary in order to enter the market.
- » Banking Currently each employer with a voucher scheme makes a single payment to the voucher provider to cover multiple employees. Under TFC, however, there will be an increase in payment volumes, which could result in

voucher providers incurring increased costs in the form of banking charges and/or internal processes. In addition, the move from a single payment from an employer through to multiple standing orders from parents might increase the likelihood of payments not being made on time – resulting in administrative costs.

- » Account Management Voucher providers currently fulfil an account management role. As todays schemes are employer based, key interactions are: (i) internally within an employer, an employee may raise queries with HR regarding aspects of the voucher scheme; and (ii) externally, the voucher provider primarily only needs to interact with a single point of contact at the employer when dealing with administrative matters. Under TFC, however, voucher providers are likely to have to communicate more directly with parents regarding administrative matters and so will need greater communication handling capacity.
- » Account numbers As accounts are per child, rather than by parent, this is likely to significantly increase the number of accounts that exist.
- » IT systems Under the new market, voucher providers will need their systems to interact with HMRC / Government and this will drive system development costs and IT infrastructure investment.
- » Regulation end users (parents) will be more exposed to a variety of risks under the new market and so some form of regulatory safeguard is likely to be mandatory (specifically both data protection standards and protection of client funds is likely to be required). There will, therefore, be incremental regulatory compliance costs.

The above changes are important, as they have direct implications for the roles that agents will play in the new market. However, when considering the specific question of interest to this study: "what market model is most appropriate?" it is critical that one assesses the above changes in the context of the following factors:

- » Firstly, in a number of aspects the role of voucher providers will remain unchanged under TFC. For example, the 'back end' management of payments and electronic account management will all largely function "as is". Consistent with this, a number of existing voucher providers we spoke to told us that their existing systems and capabilities would be fit for purpose in this regard under the new market.
- » Secondly, although parents will play a much more prominent role in driving the market

under TFC, it is likely that employers will also remain engaged. For example, several voucher providers advised us that employers were likely to have 'preferred' voucher suppliers and that they still anticipate competing for employers in that context. Therefore, whilst clearly the new market will be more similar to B2C than in the past, it would be erroneous to suggest that there will be a wholesale change from voucher providers only interacting with employers to a world where they only interact with parents. Consequently, this could somewhat mitigate the additional costs providers may incur as a result of parental interactions. However, this issue should be balanced, and it is most likely the case that suppliers will have to invest more in marketing and brand than under ESC.

» Thirdly, not all of the above changes are relevant to the effective functioning of competition in the new market (and therefore are not relevant to the choice of 'open' versus 'closed' market models). For example, changes that drive increased entry costs (such as upfront IT or brand) are clearly an important consideration when determining the appropriate market model design. However, issues such as the need to have increased communication handling capacity are of more questionable relevance, as such costs are typically only incurred as firms win additional business, and so are not pertinent to market contestability.

In summary, there are a number of important differences between how the new TFC voucher market will function relative to the existing ESC voucher market. In this study, therefore, we have sought to identify and understand the implications of these changes when evaluating the relative merits of alternative market models. However, in doing so, it is clearly necessary to evaluate which changes are most relevant to the question at hand.

2.4. Government's options for TFC market models

Government has been considering a spectrum of market models for the new voucher market. In particular, Government's recent consultation included a wide set of possible approaches, ranging from a single voucher provider appointed through Government contract, through to a fully laissez faire approach, under which firms could enter and exit the market for voucher provision without any restriction.

Government has further set out a set of objectives that the preferred market model should ultimately deliver against:

» Simple – easy for parents to understand in order to promote take-up.

- » Efficient to ensure costs are low to voucher providers, parents, Government and childcare providers.
- » Competitive ensuring that the design of market model delivers competition that drivers benefits for parents and Government (whether that competition is 'for the market' or 'in the market' – as discussed below).
- » Secure parents should be protected against the risks of voucher providers becoming insolvent or making errors – they should also be protected against fraud and information loss
- » Responsive minimising the time between parents paying into their account, the government top up being received, and payments made to childcare providers, and ensuring changes of circumstances are quickly and effectively accounted for.

In the above context, whilst Government is considering a range of options, it has identified two broad approaches to market model design:

Closed market model: The Government runs some form of competition for a limited number of voucher providers. As part of the contract the voucher provider would agree to provide a minimum level of service to the parent. The Government would pay voucher providers directly for this minimum level of service. Parents would have a choice of voucher provider, so providers would also compete for market share principally on service quality and service differentiation, or rebating fees. In economics this is often referred to as 'competition for the market.'

Open market model: A model of voucher provision where the Government does not control entry to the market, outside some safeguards to protect consumers and the Government top up payment. The Government would pay a common amount, over and above the 20% top up level, which parents would use to pay voucher providers for the provision of the account. This would allow parents to shop around amongst voucher providers for the best deal and retain any savings to put towards their childcare costs. A variant of this option is for government to pay fees direct to voucher providers, who then compete in the market on service quality. In economics, this is typically referred to as 'competition in the market.'



2.5. Understanding the relative merits of open and closed market models

Before setting out our approach to evaluating the above market model options, it is helpful to understand the 'in principle' pros and cons of open and closed market model designs.

The following table provides an overview as to what the in principle benefits and costs are likely to be, from a theoretical perspective. Beneath the table we provider a fuller description of the issues.

Table 1: Pros and cons of open / closed market models

Key issues	Open market model	Closed market model
Scope to deliver dynamic efficiencies and innovation, to the benefit of parents and Government	©	8
Avoids regulatory failure risks	\odot	
Avoids costs and risks associated with Government managed procurement	©	8
Potential to deliver most efficient route of supply where scope for product differentiation is limited	<u></u>	<u></u>
Potential to deliver most efficient route of supply where economies of scale are material	(3)	
Avoids duplication of sunk costs and stranded asset risk	8	☺

Source: Economic Insight

The key issue to understand regarding the above is that the potential for either model to deliver its potential benefits fundamentally rests on: (i) what

one believes about the likely demand and supply side characteristics of the TFC voucher market; and therefore (ii) the potential scope for competition within it. In the following we expand on this in relation to the issues summarised above.

Firstly, it is well established in economic theory (and regulatory best practice) that open market competition has the potential to yield greater dynamic efficiencies and product / service innovation relative to closed markets. The intuition for this is straightforward: that intra-firm rivalry provides a strong commercial incentive for firms to continually re-invest in driving down cost and providing the services that customers want. In contrast, whilst a 'closed' or regulated market might go some way to replicating the static cost efficiencies that one might expect to see in a competitive market, the scope for driving innovation is much reduced.

Related to the above, in an open market model, competition has the potential to reveal the 'true' efficient cost of supply over time, and the nature of services customers want over time. In contrast, under a closed model, the Government is effectively second guessing what customers want today and tomorrow and the efficient costs of supply tomorrow to varying degrees. For example, if a competition 'for the market' was held today that resulted in a limited number of suppliers being selected under the closed market model, how would Government know whether the future costs of those suppliers were efficient and thus represented good value to parents and the taxpayer? Such 'risks of regulatory failure' are well understood and lead to there being natural preference for competition over regulation.

There are also transactional costs associated with any Government managed procurement or bidding process under a closed market model; some of which would, by definition, be avoided under the open market model.

On the other hand, where the scope for product differentiation is limited, the potential 'dynamic' benefits of an open market model might be less relevant. Also, as a buyer, Government could mandate that licensed suppliers serve all customers that demand the service (e.g. a universal service obligation), reducing the risk of a lack of provision for certain customer groups.¹

Related to the above, where there are large economies of scale a closed market model may result in a more efficient outcome. This is because, in such instances, one might expect there to be only limited competition under the open market model.

Finally, where there is need to make large sunk investments, firms are exposed to stranded asset

positive externalities associated with them being served, which means the market may 'underprovide' services without Government intervention.

Although this tends to be a bigger issue where there are (a) marked differences between customer groups in terms of how much it costs to serve them and (b)

risk. In such cases, a closed market model mitigates the risk by providing security that the limited number of players in the market can earn a return on the investment required to enter. In an open market, however, there is no such mitigating factor - and thus this risk could stunt the scope for competition and the benefits it would bring. However, critically in the current case, it should be noted that existing voucher providers under ESC have themselves made investments that could be considered to be 'sunk.' Therefore, it is possible that, under a closed market model in which some existing firms would, by definition, no longer be able to continue supplying vouchers, some of those investments (which have been supported by taxpayers under ESC) would have no alternative use and thus would make no ongoing contribution to the economy.

"Put simply, the more one believes that it is possible to replicate the benefits of an

open market model by increasing the

ultimately, undermined."

number of firms supplying under a closed market model, the more the rationale for a closed market model in the first place is, selected - it is not a binary choice.

It is important to note that, in practice, there is a spectrum of market models that sit between a 'single provider closed market' and the open market model described here. For example, a closed market could have more than one provider and so could offer some degree of choice for customers. Therefore the benefits set out above may be higher or lower depending on the type of market model

Nevertheless, within this spectrum there remains the broad trade-offs outlined above. Following the above example, allowing greater choice in a closed market may be costly if there are strong economies of scale. Similarly, if choice is important to customers, it may be difficult for the Government to specify the service (or services) required in sufficient detail for potential suppliers to bid for (or, equivalently, select the best value provide on the basis of price and service quality).

Put simply, the more one believes that it is possible to replicate the benefits of an open market model by increasing the number of firms supplying under a closed market model, the more the rationale for a closed market model in the first place is, ultimately, undermined.

As noted above, therefore, at the heart of determining which model is most appropriate lies the question of 'how much' competition might we naturally expect there to be in the TFC voucher market absent any intervention from Government. In a world where we expect competition in the market to be strong, then the 'in principle' benefits of the open market model would be realised, and thus this would be net beneficial relative to a closed market model. However, in a world where we believed competition would be limited, then it is the 'in principle' benefits of the closed market model that are most relevant, and so the opposite conclusion would tend to be reached. This rationale has driven our approach and methodology, which is set out in the following section.

2.6. Our methodology and approach

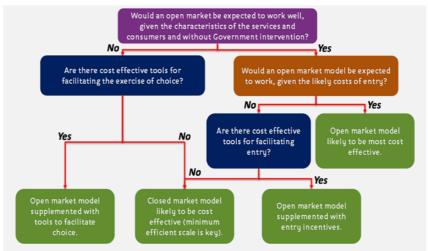
2.6.1. Our framework

Our starting point was to develop a framework for evaluating this evidence, which is illustrated in the figure at the bottom of the page. The framework sets out a set of key questions that, once answered, point towards either and open or closed market model. Consistent with the

> discussion of the 'pros and cons' of open and closed market models set out previously, the essence of our framework rests on the following principles:

» That if one expects that, absent any direct intervention, the market for TFC vouchers would function effectively (i.e. one would naturally expect there to be effective competition)

Figure 2: Framework for market models



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then the open market model would be preferred.

- » That if there were impediments to the functioning of competition in a free market, one would need to consider whether there are any policy tools that would mitigate those impediments in a cost-effective manner in which case the market model would still be preferred subject to those policy tools being implemented.
- » That if there are no cost effective tools for addressing any identified impediments to free competition, a closed market model would tend to be preferred.

Following from the above framework, the approach we have adopted throughout this report is to: (i) consider what relevant impediments to competition could exist in principle; (ii) evaluate the available evidence to inform whether those impediments exist in practice and, if so, to what degree; and (iii) to then consider (in cases where impediments are found) what could be done to mitigate them. In essence, the strength of any impediments and the available tools for minimising them is the determinant of whether an open or closed market model should be preferred. In practice, we consider the likely scope for competition absent intervention separately for both 'the demand side' (i.e. used of vouchers primarily parents - ability and willingness to switch provider) and 'the supply side' (i.e. the ability of voucher provider firms to enter and expand in the market and to compete freely).

2.6.2. The evidence we have reviewed

Within the framework described above we have considered a wide range of evidence and information. This has included:

- » Economic theory and first principles, which we have used to inform the likely functioning of competition in the TFC voucher market, given our understanding of the markets' demand and supply side characteristics.
- » Competition law and regulatory precedent, which we have used to help identify both the potential features of markets that might impede competition, but also the policy tools that can be used to aid it.
- » A range of *financial data* relating to existing voucher providers under the ESC scheme, which we have used to inform our assessment of both (i) the likely supply side characteristics of the new TFC voucher market; and (ii) the scope for entry into the TFC voucher market by existing suppliers.

- » Minimum efficient scale modelling, which we have used to examine the potential number of firms that might be supportable in the new market.
- » Discussions with existing voucher providers, which we have used to inform our views as to what potential entrants might have to do in practice in order to enter the TFC market.

It is important to note that an inherent limitation to our study is that the market for TFC vouchers does not yet exist. Consequently, in evaluating the evidence set out above within our framework, we are in essence seeking to:

- draw inferences about what we think the likely characteristics of the market might be;
- given those characteristics, consider the implications for the likely effectiveness of competition.

In seeking to make inferences about the likely characteristics of the TFC voucher market, we believe that an analysis of the existing ESC voucher market represents a key piece of evidence. This is because:

- » Notwithstanding the changes arising under TFC, the supply side characteristics of the existing market are likely to be somewhat similar to those for TFC (because in many important respects, the core activities undertaken by voucher providers will be similar).
- » Secondly, existing voucher providers may be well placed to enter the new market, and so assessing the practicality and commercial incentives for doing so provides direct information as to the potential scope for market entry.

Of course, as set out above, we are aware that there will be important differences between the provision of ESC and TFC vouchers. In particular – that under TFC voucher providers will be operating in more of a B2C rather than B2B environment. To reflect this, we have:

- » Spoken to existing providers to ask them what they might do differently under the TFC market and what this might imply with respect to both entry and ongoing costs of supply (i.e. rather than relying on assessment of historic financials under the exiting market, we have also sought to determine what might change).
- When making inferences based on financial analyses of existing suppliers, we have incorporated the potential for changes under TFC. For example, in considering minimum efficient scale in the market, we have allowed for higher costs of goods sold than is currently

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observed in the ESC market, reflecting qualitative evidence we obtained indicating that these would most likely be higher in the new market.

We also give consideration to whether there may be green-field entry and, relatedly, what other markets might help inform an assessment of the scope for supply-side competition in relation to the TFC voucher market. In this case, we suggest that - given the relatively low value of voucher account administration if considered in isolation new entry may be more likely to come from firms in either horizontally or vertically related markets, such as nursery provision. However, as a result, the supply side characteristics of the markets in which those firms operate could be very different to pure voucher account administration. For example, nursery provision is relatively highly capital intensive. Consequently, in many cases it is not clear that an analysis of the issues such as: investment costs, scale economies or access to finance in such markets would allow one to draw any meaningful inferences regarding entry into the TFC voucher market. This is not to say that such comparators should not be considered; but, rather, we think the implication is that the existing voucher market represents an important reference point.

2.7. Structure of our report

The remainder of our report is structured as follows:

- » Section 3 sets out our assessment of the demand side issues – and our related conclusions and recommendations.
- » Section 4 sets out our assessment of the supply side issues – and our key findings.
- » Section 5 contains our overall conclusions and recommendations relating to the appropriate choice of market model.



3. Demand side analysis

We set out our analysis of demand side issues relating to the likely functioning of competition under HM Treasury's proposed market models. In particular, we evaluate whether employers and parents will be able to access, assess and act on information to select the service that offers the best value.

Our key findings relating to our demand side analysis are:

- (i) There are numerous triggers that will encourage employers and parents to access the information they need to choose a provider. It is also likely that there will be sources of information that customers can draw on to identify their options.
- (ii) Parents and, to a lesser extent, employers may find it difficult to assess the quality of service from different voucher providers prior to using them. However, some of these difficulties may be mitigated by the information made available by third-parties.
- (iii) There may be some potential impediments to employers and parents acting on the information they gather by switching to the voucher provider that offers the best value, but these impediments are relatively modest compared to other markets.
- (iv) Our demand-side analysis is generally supportive of the open market model, conditional the identified risks being managed.

3.1. Overview

Our overarching approach is to consider what the potential scope for competition might be in the TFC voucher market absent government intervention. This is because, where the scope for competition in the market is strong, the in principle benefits of the open market model are likely to be greater than those of the closed market model, and vice-versa. In this section, we consider the above in relation to the demand side of the market.

A significant driver of competition in the TFC voucher market will be the ability and willingness of parents and employers to:

- identify and select the voucher provider that best meets their needs and preferences; and
- switch between voucher providers to take advantage of better offers.

If parents and employers are unable or unwilling to engage in this way, the competitive pressure on voucher providers will be lower than if they did. This would tend to lead to higher prices, lower service quality and more limited service innovation.

Figure 3: Virtuous circle between consumers and competition

Well informed, confident, rational and effective consumers can play a key role in activating vigorous competition between firms

Vigorous competition should provide firms with incentives to deliver what consumers want as efficiently and innovatively as possible

Source: OFT

Under both the 'closed market' and the 'open market' models, the ability and willingness of consumers to engage with the market will be a significant driver of competition – that is, both models envisage that customers will be able to choose between voucher providers. The difference between the two models is that the open market model relies exclusively on parents and employers to 'vote with their feet' to drive competition. In contrast, the 'closed market' model involves an up-front competition orchestrated by the Government, which would secure some of the benefits of competition.

Therefore, if there was a significant risk that parents and employers would be unable or unwilling to switch supplier, this would be one reason to pursue a closed market model over an open market model. Conversely, if this risk is limited, one would favour an open market model (absent potential deficiencies on the supply-side, discussed in the next section of this report) due to

the fact that it would help avoid the costs associated with:

- orchestrating such a competition;
- the costs associated with limiting choice to parents and employers; and
- in a dynamic sense, the costs associated with keeping pace with what represents 'a good deal' over time.

The remainder of this chapter is split into four main sections. The first two sections set out the key demand-side issues that we have considered and the analytical framework we have used to evaluate them. The third section applies the framework to the TFC voucher market. The fourth section sets out our recommendations and conclusions.

3.2. Key demand-side issues

There is an existing market for the supply of childcare vouchers under the ESC scheme. A critical difference on the demand-side under the TFC scheme is that eligible parents will be able to choose their own voucher provider, whether or not their employer offers access to one.

Evidence from numerous competition-related investigations undertaken by the Office of Fair

Trading (OFT) and the Competition Commission (CC) shows that competition in consumer-facing services works well when consumers, here parents, are able and willing to *access, assess and act* on information to select the service that offers the best value.

The evidence also suggests that the characteristics of some services, the characteristics of consumers and the decisions taken by providers, can impede their ability or willingness

to access, assess and act. For example, some financial services are inherently complex or require consumers to make difficult judgements about their future circumstances (for example, a mortgage). These complexities can make it difficult for consumers to make the best decisions and, in some cases, can deter consumers from trying altogether.

Accordingly, the primary objectives of our analysis are three-fold:

- first, identify whether there are likely to be such impediments;
- second, seek to gauge their materiality; and
- third, consider what, if anything, could be done to help alleviate any impediments.

As part of this, we consider what role employers could play under the new arrangements and, to the extent that they have some influence over parents' choice of voucher provider, whether they would face similar impediments to choosing between and switching suppliers.



Clearly, a key challenge for our work is that the TFC voucher market does not yet exist and so we do not observe how parents, employers and providers actually behave. To help address this challenge, we draw on various sources of information, including:

- what we know about the likely characteristics of the TFC service;
- the information that HMT has gathered via surveys and discussions with parents and employers; and
- comparisons to other markets that have been investigated by the OFT and CC.

The next section sets outs an analytical framework for our analysis. By drawing on the lessons from other markets in which competition has been studied in detail, we identify the key conceptual and empirical questions that need to be answered.

3.3. Analytical framework

Our analytical framework is based on the access, assess and act paradigm set out above. That is, we consider the process or journey that consumers would follow to select and switch between childcare voucher providers and seek to identify the potential impediments that could emerge along the way.

Specifically, to select the service that offers the best value, consumers need to:

- » Access information about the various offers available in the market;
- » Assess these offers in a well-reasoned way; and finally;
- » Act on this information and analysis by purchasing the good or service that offers the best value.

The OFT, the CC and other sector regulators such as Ofgem have used this paradigm in order to help evaluate the effectiveness of the demand-side of the markets.²

Below we set out the main issues that tend to emerge at each stage of the journey and present the 'tests' that we will then go onto apply to the TFC voucher market to help evaluate whether it is likely to work well on the demand-side. We have drawn on our experience of conducting competitive assessments of other markets and also a review of recent competition investigations. Annex B sets out a brief overview competition problems found in a number of recent competition investigations and the remedies implemented.

3.3.1. Accessing information

The first step in the journey is the ability and willingness of consumers to access information about the various offers in the market.

3.3.1.1. Triggers for seeking information

For this to happen, something first needs to provoke a consumer into seeking information. The more frequently these 'triggers' occur, the more frequently consumers will contemplate and research their options. Consequently, other things equal, this is likely to increase the competitive intensity of a market.

Evidence from other markets suggests that there are various different types of triggers, which we have categorised below.

- » Negative triggers for example, receiving bad service from an existing supplier – such negative triggers are given by consumers as their reason for switching Personal Current Accounts.
- » Positive triggers for example, hearing that a friend was treated particularly well by their existing supplier – such positive triggers are given by consumers of legal services as their reason for choosing a particular local lawyer.
- » Natural triggers these are unrelated to the relative quality one service over another, but rather arise as a characteristic of the service – for example, the annual renewal of car insurance, mortgaging when moving house; changing jobs and exploring new pension arrangements.

The evidence suggests that the *type* as well as the presence of triggers in a market can influence its competitive intensity.³ Triggers are closely related to the incentive to switch – that is, they provoke consumers to undertake further research to evaluate whether switching will be beneficial to them.

For example, it has been argued that markets that exhibit positive triggers are more likely to be associated with, and lead to, pro-active and engaged consumers, and so competitive outcomes. In contrast, markets that exhibit only negative triggers (and which tend to be associated with more 'passive' consumers) can be less effective at encouraging competition. This is because service has to deteriorate to a low level before consumers are provoked into exploring their options.

For example, see OFT (2010), "What does Behavioural Economics mean for Competition Policy? and also the Competition Commission's Issues Statement for its study into Private Motor Insurance http://www.competition-commission.org.uk/our-

work/directory-of-all-inquiries/private-motor-insurance-market-investigation.

For example, see the OFT (2008), "Personal Current Accounts in the UK".

Test 1: Will there be triggers in the supply of tax-free childcare vouchers and what type will they be?

3.3.1.2. Availability of information

Clearly, information about the various offers in the market needs to be available for consumers to assess the various offers in the market.

Evidence from other markets suggests that the 'availability of information' captures three different issues.⁴

- » Coverage that is, whether information is available about the offers of all suppliers, or just some of them.
- » Completeness that is, whether information is available about all aspects of the offers, or just some of them. For example, in the context of its on-going investigation into the supply of Private Healthcare, the CC is considering whether patients can access information on the price and quality of consultants and hospital.⁵
- » Ease that is, how easy it is for consumers to find the information, even it is available. For example, in the context of its investigation into the supply of bulk liquefied petroleum gas (LPG) to domestic customers, the CC found that there was not a single easily accessible source of information about the prices charged by different bulk LPG providers (such as Calor and Flogas).6

Test 2: Will information of sufficient coverage and completeness be easily accessible to consumers of tax-free childcare vouchers?

3.3.2. Assessing the offers

The second step in the journey is the ability and willingness of consumers to use the information they have gathered to compare one service to another and evaluate which one is best for them.

The ability of consumers to make this assessment depends on two main factors.

- » Complexity as noted above, the extent to which the service in question is inherently complex or requires consumers to make difficult judgements about their future circumstances. The service may be hard to evaluate without trying it out. This is linked to the capability and experience of the consumers to make sense of the complexity.
- » Comparability that is, the extent to which the information allows consumers to make like-forlike comparisons across different offers.

Evidence from other markets suggests that a lack of comparable information, or service complexity, can cause consumers to misjudge the benefits of one service compared to another, and so not choose the service that is best for them.⁷ The evidence also suggests that markets for information can emerge in response.⁸

This can be caused by a general misunderstanding, but also two other behaviours. The first is a tendency to focus on the more salient or understandable features of the service – that is, consumers may attach too much weight in their assessment to what is understood rather than what really matters. The second is tendency to use inaccurate 'rules of thumb' to overcome the complexity (for example, 'the service of one supplier will be much the same as another').

For example, in its Retail Market Review, Ofgem considered that the difficulties that consumers face in assessing many different tariff options in retail gas and electricity markets could cause consumers to "...adopt filters or shortcuts to navigate the information (e.g. 'rules of thumb', 'reference points')..."

For example, see Schlesinger and Schulenburg (1991), "Search Costs, Switching Costs and Product Heterogeneity in an Insurance", The Journal of Risk and Insurance

http://www.competition-commission.org.uk/ourwork/directory-of-all-inquiries/private-healthcaremarket-investigation

http://www.competition-commission.org.uk/ourwork/directory-of-all-inquiries/domestic-bulk-liquefiedpetroleum-aas

For example, see the Competition Commission's investigation into Northern Ireland Personal Banking,

http://www.competition-commission.org.uk/ourwork/directory-of-all-inquiries/personal-currentaccount-northern-irish

There is a thread of the academic literature, which we do not consider in detail here, about how competition between firms could help and hinder information revelation. See for example Gabaix and Laibson (2006), "Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets", The Quarterly Journal of Economics.

Ofgem (2011), "What can behavioural economics say about GB energy consumers?"

Test 3: Is comparable information on different offers likely to be available?

Test 4: Is the service inherently complex?

3.3.3. Acting on the information

The final step in the journey is for consumers to act on their information and analysis by purchasing the good or service that offers the best value.

Whether consumers are able and willing to act on their information and analysis primarily depends on whether there are 'switching costs' that would offset the benefits they identify (or even stop them accessing and assessing information in the first place). The presence of switching costs can significantly reduce competition.¹⁰

Evidence from other markets suggests that there are various types of switching costs.

- » Financial costs such as the costs associated with severing a contract early, administrative fees levied to cover the cost of overseeing the switching process and so on.
- >> Time and hassle costs such as the time involved in filling out the forms necessary to facilitate a switch, cancelling and rearrangements payments and so on.
- » Risks such as the risk of the process going wrong – in the context of personal current accounts, a major issue for consumers contemplating switching was the perception that their ingoing or outgoing payments would go missing during the switching process.

These costs will be particularly important in situations where the actual or perceived benefits of switching are small. This can, for example, arise when the prices and charges of a service are hidden from customers and so they think they are receiving something 'for free' but are not.¹¹

Test 5: Are consumers likely to face actual or perceived switching costs?

Economic theory suggests that competitive outcomes could still be achieved even when there are impediments to switching.¹²

The reason for this is that, anticipating future high profits from 'locked-in' consumers, providers will compete fiercely to win them in the first place. If there is a vibrant supply-side of the market, the intensity of the initial competition could be sufficient to ensure that over a consumers lifetime with a firm, he or she is no better or worse off than if there were no impediments to switching.

Economic theory also points to the conditions where competitive outcomes are most likely to arise in markets with impediments to switching.
Briefly, they are:

- » First, when customers are 'forward looking'. That is, they anticipate that they will be 'locked-in' and seek out the best lifetime deal.
- » Second, when there is a high flow of 'new to market' relative to 'locked-in' customers – that is, when there is naturally a 'high churn' of customers. For example, new or growing markets are likely to have this feature. This ensures that firms have a continued incentive to keep their price and service attractive so as to win the new customers.
- » Third, when firms cannot 'discriminate' on price or service terms between 'new to market' and 'locked-in' customers. This ensures that 'locked-in' customers can benefit from the same freedom that 'new to market' customers have to pick and choose. Such discrimination is difficult when it is hard for firms to: (a) detect which customers are 'locked-in;' and (b) flex price and service terms for different groups of customers (for example, it may be costly or technically difficult to provide one level of service to some customers and another level of service to others).

Klemperer, P (1987), "The competitiveness of markets with switching costs", Rand Journal of Economics.

An example is foregone interest in the context of personal current accounts.

For a useful overview of this literature, see Farrell and Klemperer (2007), "Competition with switching costs

and network effects", Handbook of Industrial Organization, Volume 3.

For example, see OFT (2003), "Switching costs", Economic Discussion Paper 5.

Test 6: Is the competition for 'new-to-market' consumers likely to protect 'existing consumers'?

3.3.4. A note on the relevance of behavioural economics

Over the past decade there has been significant interest in the implications of behavioural economics for competition and consumer policy.

For example:



"A critical difference on the demand-side under the TFC scheme is that eligible parents will be able to choose their own voucher provider, whether or not their employer offers access to one. However, the evidence also suggests that the employers will continue to have an important role to play."

- in the context of its review of energy retail markets, Ofgem answered the question "What can behavioural economics say about GB energy consumers?";14
- Ofwat undertook an analysis aimed at "...improving the understanding of behavioural responses to charging practices in the water industry among groups at risk of affordability problems..."; 15
- drawing on behavioural
- economics, Ofcom has concluded that "...experiments may have a role in developing policy for markets that Ofcom regulates...";16
- a paper by the Financial Conduct Authority "...sets out what behavioural economics tells us about consumer decision-making in financial markets...";¹⁷ and
- the OFT has also published numerous papers on the implications of behavioural economics in competition policy.¹⁸

A complete behavioural analysis of the yet-to-exist TFC market is not feasible at this time. However, the lessons from behavioural economics have influenced the approach to analysing consumer behaviour set out above – one example of this is the tendency for consumers to use inaccurate 'rules of thumb' to overcome complexities. We think that behavioural economics emphasises two

- further issues of particular relevance to this work, which we consider in the next section:
- » First, the tendency for consumers to exhibit 'status quo bias' – that is, the tendency for consumers to prefer their current service over others (even if others would be 'better'). This tendency would seem to be particularly relevant for those parents who already belong to schemes via their employers under ESC.
- » Second, the tendency for consumer to exhibit 'loss aversion' – that is, the tendency for consumers to attach more weight to potential losses than potential gains. This would suggest that potentially 'small' actual or perceived costs (compared to benefits) could deter consumers from switching.

3.4. Applying the tests to tax-free childcare vouchers

In this section we apply the 'tests' identified above to the supply of TFC vouchers. Before doing so, we consider the important role of employers in the new arrangements, and the implication of their involvement for competition.

3.4.1. The important role of employers

As noted above, a critical difference on the demand-side under the TFC scheme is that eligible parents will be able to choose their own voucher provider, whether or not their employer offers access to one. However, the evidence also suggests that the employers will continue to have an important role to play in the new market place.

- » HMT's qualitative discussions with 10 employers reveals that most anticipate playing a significant role under the new arrangements:
 - Only 1 anticipates having a 'de minimis' role under the new arrangements – that is, restricting their activity to pointing employees to Government websites;
 - 3 of them anticipate having a 'maximalist' role – involving, amongst other things, the employer buying vouchers from its chosen provider through payroll and acting as a middleman between the voucher provider and the employer; and
 - 6 of them anticipate having something between a 'more involved' and maximalist role, where the 'more involved' role includes

Ofgem (2011), "What can behavioural economics say about GB energy consumers?"

Ofwat (2012), "Using Behavioural Economics to Encourage Water Bill payment by Debtors and Those who Struggle to Pay".

http://stakeholders.ofcom.org.uk/market-dataresearch/other/telecoms-research/experiments/

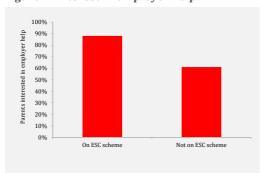
FCA (2013), "Applying behavioural economics at the Financial Conduct Authority".

For example, see OFT (2010), "What does Behavioural Economics mean for Competition Policy?

the employer having an arrangement with voucher provider.

- » Moreover, according to HMT's survey of parents, there is an expectation amongst employees that their employers will be involved:
 - 88% of parents enrolled on a ESC scheme say that they would be interested in their employer helping them "register for, and make payments into, their voucher account"; and
 - 61% of parents not enrolled on an ESC also said that they would be interested in their employer helping them in this way.

Figure 4: Interest in employer help



Source: HMT survey

The potential role of employers in the new TFC scheme has a number of implications for our work; and also the likely effectiveness of the demand-side of the market.

- » First, the evidence suggests that demand-side competition problems tend to be more prevalent in consumer-facing markets than in business facing markets. That is, where demand-side problems have been identified by competition authorities as part of their market studies, they tend (although not exclusively discussed further below) to be in relation to consumers rather than firms. Part of the reason for this is that firms may be more capable of accessing and assessing information. This suggests that the involvement of employers would help increase the competitive pressure on TFC voucher providers.
- » Second, for parents to benefit from the involvement of employers, the interest of parents and employers would need to be (partially) aligned in the sense that employers will choose a service that parents like. There is some evidence to suggest that this would be the case.
 - HMT's survey of employers shows that 85% of them stated that their primary reason for

- selecting a ESC voucher provider was "ease of administration".
- HMT's survey of parents shows that 42% of them stated they value the "convenience" of the childcare voucher service they receive under ESC, 25% value the "flexibility" and 17% value the "reliability".

This does not mean that parents and employers will necessarily care about the same aspects of the TFC voucher service (e.g. "ease of administration" and "convenience" might mean different things to each), but rather if parents do not like the voucher service, they could put pressure on an employer and this would compromise its "ease of administration". Of course, this dynamic is likely to vary from one workplace to another, and it is hard to say at this stage how important it might be overall.

Another way of looking at this issue is whether employers might have the opposite incentive: that is, to choose a voucher provider that parents would not choose for themselves. One possible reason for this could be price: for example, if voucher providers decided to charge employers for the service and if parents expected to receive a service for "free" (rather than by salary sacrifice), employers might decide to choose the cheapest service, not necessarily the one that offers parents best value for money. The strength of this incentive depends on the potential savings an employer could make by adopting this approach versus the additional time and hassle costs associated with managing negative feedback from parents. Of course, the presence and scale of both of these effects is currently unknown. What we do know is that, for some employee benefits, parents are willing to sacrifice salary to get them and this would tend to reduce the strength of this potential incentive. 19

Our analysis and conclusions do not rest on the involvement of employers because under the new arrangements, employees (i.e. parents) can also drive competition. But there are reasons to think that the involvement of employers is likely to help drive competition to the benefit of their employees.

Therefore, in applying our tests, we consider whether employers they could face the same or different impediments to parents in terms of acting on their information – that is, whether they could face switching costs.

We now turn to applying the 6 tests listed above to the provision of TFC vouchers. Our assessment is based on the best information available about the organisation and characteristics of the service. We recognise that some of these aspects are under consideration and consultation on and changes to them could affect our assessment.

Based on the current model of supply, discussed more fully in the next section, there may not be an explicit

^{&#}x27;price' for voucher provision and it might rather be part of a bundle of other employee benefits.

3.4.2. Accessing information

Test 1: Will there be triggers in the supply of tax-free childcare vouchers and what type will they be?

3.4.2.1. Natural triggers

We have identified a number of natural 'triggers,' which would seem to give parents and employers reason to consider and reconsider their options. They are:

- All parents, even those currently receiving childcare vouchers under ESC, will be required to go through a registration process to join the scheme (both initially and on the birth of any additional children).
- All parents will be required to reregister every three months to reconfirm their eligibility and keep their accounts active.
- Around one-quarter of parents will have an on-going interaction with the service by varying their payments into the voucher account. According to HMT's survey of parents, around one quarter of parents anticipate that they will vary their (usually monthly) payment into their account.

3.4.2.2. Negative and positive triggers

At present, it is harder to be certain about what the negative and positive triggers for switching might be in the provision of childcare voucher services, as the services will change as they become more consumer facing.

However, there is some information that allows us to anticipate what the main non-price dimensions of competition could be; and so what the negative and positive triggers could look like.

- » From research undertaken by HMT, we know that providers currently emphasise the quality of their service in terms of administrative ease for employers on their websites. For example, the websites include endorsements from large employers and quotations from users.
- » Based on HMT's survey of parents cited above, there is reason to think that service quality will remain a key dimension of competition. Indeed, our discussions with the existing providers reinforces this view.

"Service differentiation will be key."

"This [the payment of childcare] is a very sensitive subject for people – you need to be sport on – things cannot go wrong." –

Existing suppliers

» Our discussions with voucher providers highlighted the things that are likely to matter

Some differences in service can be subtle, but important. A B2B example is call handling services: some suppliers assume that their customers will be to parents based on their experience so far. They included:

- Being able to pay their childcare provider via the account.
- Being able to sign up to the account easily and quickly.
- Having access to a wide range of methods to make payments into and out of the account (e.g. BACS, direct debits and standing orders).
- Easily being able to increase or reduce payments into their accounts – and increase or reduce payments out of their accounts.
- Ways of reducing the risk of the incorrect sum or timing of payments to their childcare providers.
- Ways of reducing the risk of payments going missing altogether.
- A reassuring point of contact to diagnose and rectify problems swiftly.
- Ways of managing the payments / optimising the accounts of multiple children.
- Potentially, integration with other child related services, such as emergency child care.

This list suggest that both positive and negative triggers for search and switching could emerge. For example, a negative trigger would be a system error on the voucher provider's side, leading to a failure of payment.

But, importantly for competition, there is clearly scope for positive triggers and service differentiation between providers. For example, there is scope for differentiation in terms of:

- how parents can access and manage their accounts, for example via mobile devices;
- 'early warnings' of insufficient funds being available to pay the childcare provider;
- alerts that a top-up entitlement period is coming to an end;
- access to a short-term cash buffer to cover unexpected shortfalls in funds;
- the quality of customer service for the core services;
- free or paid for access to advisory / support services in relation to childcare, family matters or tax matters; and
- loyalty reward schemes, for example by partnering with other businesses.

This type of service differentiation is seen in other financial services and other B2C services more generally. Of course, these specific examples may or may not arise in practice, but it would seem unduly pessimistic to assume that the service will be inherently 'vanilla', where all providers will inevitably be the same and so the scope for differentiation and competition over service quality limited.²⁰

closed over Christmas, others ask to make sure. In a B2C context, some customer services require you to

So, overall, we think that there are good reasons to think that this aspect of the consumer journey is likely to work well and help lead to competitive outcomes in an 'open market'.

We think that a potential issue relates to whether those parents who are already signed up to a voucher provider via ESC or could be either under ESC or TSC would not fully consider their options and instead 'roll over' their current arrangements. We consider that the competition risks associated with this might be limited given that employers would seem to face an incentive to select a voucher provider that delivers value to parents, as discussed above.

Therefore, we give this test a GREEN rating.

We also consider that there are relatively low costs of ways of encouraging parents currently receiving childcare vouchers from a provider to give full consideration to their options, as set out later in this chapter.

3.4.3. Assessing the offers

Test 2: Will information of sufficient coverage and completeness be easily accessible to consumers of tax-free childcare vouchers?

Test 3: Is comparable information on different offers likely to be available?

Test 4: Is the service inherently complex?

3.4.3.1. Sufficient information

At present, the only publicly available information on the service provided by ESC vouchers is from the websites of the voucher providers themselves. The information typically focuses on the level of service offered to employers, rather than their fees and charges, which we understand are typically individually negotiated.

It is not surprising that there is not currently consumer-facing information on the service provided, given that the ESC voucher market is primarily B2B in nature.

There is, however, evidence to suggest that as the TFC market develops information will emerge. Specifically, we have reviewed a number of popular comparison and review websites to establish whether they demonstrate an interest in either ESC or TFC – that is, whether they would be well placed to provide information to consumers. We found that MoneySavingExpert.com, Which?, Moneysupermarket.com and Mumsnet.com each contain information of relevance to childcare vouchers.

wait 'on hold' while an operator takes your call, others call you back.

Table 2: Examples of third party interest in childcare vouchers

MoneySavingExpert.com

MoneySavingExpert.com has a section of its website called "Childcare Vouchers", which contains information about how they work, what counts as childcare and where to get them. It also lists some of the voucher providers and very briefly some of their characteristics that might be relevant to parents seeking to encourage their employers to enrol on such a scheme (e.g. it notes that Kiddivouchers donates at least 5% of profits to various charities).

Which?

Which? has a section of its website called "Childcare vouchers explained". It describes what childcare vouchers are (including their value), compares childcare vouchers to childcare tax credit, and also related entitlements (such as free childcare).

MoneySupermarket.com

MoneySuperMarket.com contains articles on how the new TFC scheme will operate. It also compares other financial services side by side in terms of key price metrics (e.g. planned overdraft costs) and also customer satisfaction ratings from MSE.

Mumsnet.com

Mumsnet's site also sets out the new scheme on its website.

As well as these 3rd party providers of information, it is possible that employers will further help parents make good choices, on the basis of the evidence set out above. We were also told anecdotally by the voucher providers (in the context of attracting customers) that informal networks between parents are an important additional source of information.

So, overall, we think that there are good reasons to think that this aspect of the consumer journey is likely to work well and help lead to competitive outcomes in an 'open market'. We therefore give this test a GREEN rating.

3.4.3.2. Comparability and complexity of information

We think that a potential issue is the extent to which comparable information is available. On the one hand, the overall customer satisfaction ratings available on websites such as MoneySuperMarket.com would help facilitate likefor-like comparisons between offers. Moreover, relative to other financial services, which have features that increase their complexity (such as

overdraft facilities on current accounts, underover payments of mortgages and so on) this seems to be a relatively easy to understand product that is not inherently complex. On the other hand, the differences between the service qualities of suppliers could be hard to discern without using them, which could make objective like-for-like comparisons difficult in advance.

Therefore, we rate tests 3 and 4 as ORANGE.

We also consider ways in which a potential lack of information could be overcome, as set out later in this chapter.

3.4.4. Acting on this information

3.4.4.1. Switching costs

Test 5: Are consumers likely to face actual or perceived switching costs?

To apply this test, we have considered what parents and employers are likely to be required to do under the new arrangements to switch from one voucher provider to another. We note that there is currently some uncertainty over how the switching arrangements will occur and who will be responsible for certain aspects of the switch.

For parents

We have been told by HMT that parents seeking to switch from one employer to another under TFC are likely to undergo the following process.

- » The parent chooses their new voucher provider.
- The parent registers their details with the new voucher provider in order to open the account. As part of this, the parent would provide information to the new voucher provider that it needs to initiate the switching process.
- » The new voucher provider, on behalf of the parent, would notify HMRC that the parent is switching voucher providers.
- » No-one notifies the childcare provider, because each child is assigned a unique code which is used in the payment process.
- » HMRC terminates top-up payments to the old voucher account and starts making top-up payments into the new voucher account as and when the parent starts making his / her payments.
- The parent could spend the vouchers inclusive of top-ups remaining in the old account – 12

- months for children who have reached the upper age limit and 24 months for children younger than that.
- » The parent could also withdraw their contributions and pay the money into the new account, but they would lose any unspent topups from entitlement periods.
- » Parents would then need to stop making payments into their old voucher account and start making payments into their new voucher account. This would be done by changing a standing order or by BACS transfer.
- » We have been told by HMT that parents starting under an employer led scheme would need to tell employers to stop making payments from their salary to the old voucher account – instead of stopping standing orders / BACS payments from their bank accounts.

For parents, we have identified two potential switching costs that could deter them and employers from switching. They are:

- First, the risk of losing unspent top-ups from previous entitlement periods if they wish to transfer funds and / or the time cost associated with mitigating this risk; and
- Second, the costs associated with the time and effort in managing the switchover process – such as the changing of standing orders and direct debits and ensuring that it all runs seamlessly.

For employers

Survey evidence collected by HMT shows that around 16.6% of employers have switched their voucher provider once and 1.6% have switched their voucher provider more than once. 21

However, at present, it is not yet known how employers would switch between voucher providers and this is one reason why it is difficult to infer what the rate of employer switching will be under TFC. That is, the possible situation whereby employers offer employees access to a voucher provider and, potentially, make payments to it on employees' behalf by (net) salary sacrifice – and decide to switch to another voucher provider.

- » HMT's view is that they are not mandating an employer role under the new arrangements, and so this will be matter for negotiation between employers, parents and the existing and new voucher provider.
- » The voucher providers we have spoken to said that it was hard to say how this process would

It is not clear over what time horizon these switches have occurred.

work, before the details of the registration and eligibility reconfirmation processes were finalised. In general, they felt that this was a critical part of the process and that it had to be thought through carefully and for the responsibilities between different parties to be very clear.

Overall, based on two potential switching costs faced by parents and the uncertainty surrounding the process from employers' perspective, we give this test an ORANGE rating. We consider ways in which the potential actual or perceived switching costs could be mitigated in the next section of this chapter.

Examples of switching costs in other sectors

The OFT and CC have considered and identified switching costs in a wide range of consumer facing markets over the past 10 years. Below we set out a few examples to illustrate these.

- » Bulk liquefied petroleum gas market *investigation.* Bulk LPG is used by customers that are not connected to the mains gas network. The industry arrangements were such that, in order to switch supplier, customers had to have their existing tank (often installed in their garden) uplifted by the outgoing supplier and replaced by the incoming supplier. Here the CC found that, as well as the time and hassle costs associated with this, suppliers sometimes charged customers to have their tank uplifted, which was found to deter switching. For the purpose of this study, where the 'physical' aspects of switching are clearly less relevant, it highlights the importance of the arrangements for switching and the financial and nonfinancial arrangements between the customer, and the incoming and outgoing suppliers.
- » Northern Ireland Personal Banking market investigation (and other banking investigations). Here, the CC found that the actual or perceived hassle and risks associated with switching personal current accounts represented a major switching cost to customers. The risks were primarily linked to incoming and outgoing payments going astray and the consequent time and financial costs associated with such problems. Subsequent studies by the OFT found much the same issues in Great Britain. Interestingly, these later studies found that the perception of hassle and risk was a key driver of customer behaviour - of the (few) customers that did switch, a relatively small proportion experienced the difficulties so many are concerned about.
- » Energy retail. Ofgem found that switching costs were created as a consequence of retail tariff complexity. That is, if it is found that although all of the relevant information was available and, in principle, would allow customer to make like-for-like comparisons to be made, the quantity and complexity of tariffs meant that in practice significant time and effort would be involved. It highlights the interconnections between the 'assess' and 'act' stages of the customer journey.

3.4.4.2. Competition for new customers

Test 6: Is the competition for 'new-to-market' consumers likely to protect 'existing consumers'?

The evidence suggests that competition for 'new-to-market' consumers could be significant and that this could help protect any existing consumers that are, or feel, locked into their existing suppliers for the reasons set out in the previous section.

The primary reason for this is that the evidence suggests that churn rates – that is, the rate at which new consumers join the TFC scheme, and existing consumers leave the scheme – will be relatively high.

- » First, by definition, in the first year of the scheme all consumers will be 'new-to-market'.
- » Second, over the subsequent seven years of the scheme, the number of new-to-market consumers will be significant in each year, as the child age eligibility criteria rises from 5 to 12. Indicative estimates provided to us by HMT suggests that, by itself, this would be between around 13% and 3% around 8% on average of consumers being new-to-market in the first eight years of the scheme.
- » Third, parents will leave the scheme as their children age and their circumstances change. Again, indicative estimates provided to us by HMT suggests that for the ESC scheme, around 20% of the stock of existing members leave each year and are replaced with new members.

Although the two schemes are not directly comparable, based on the above evidence, a reasonable expectation of the proportion of the consumers that are 'new-to-market' would be around 28% in the first seven years after the scheme's launch and around 20% thereafter.²²

We think that this figure is 'high' in absolute terms. One way of thinking about it is that a supplier with a poor reputation for the service it offers its existing customers may find itself without customers in 5 years simply as a consequence of this 'natural attrition'.

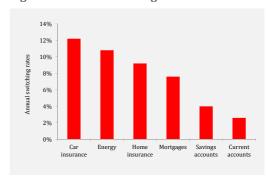
Nevertheless, we have also compared it to the rate of churn to five other services.

One source of evidence is from an OFT survey conducted in the context of its market study of personal current accounts in $2008.^{23}$ The figure

This is equivalent to parents using the account for about 5 years, which seems reasonable. It is the lower of the estimates provided to us by HMT.

http://www.oft.gov.uk/shared_oft/reports/financial_p roducts/OFT1005.pdf below shows an estimate of the percentage of respondents to the OFT's survey that switched suppliers in one year. The switching rate is one estimate of the proportion of customers that, although are not new-to-market, could be seen as being 'contestable' by suppliers in each year and so have some of the characteristics of new-to-market customers.

Figure 5: Annual switching rates



Source: OFT

The figure shows that the annual switching rates are no more than 12% in these other consumer facing services. With the exception of car insurance, the potential churn for TFC vouchers identified above is more than double the switching rates seen in these other services.²⁴

For a subset of the services, we have also gathered evidence on the potential churn rates. We have calculated our estimates of churn in the following way.

- » For car insurance, the service with the highest switching rate according to the OFT survey, we have estimated churn by dividing the number of driving license passes in 2012/13 (677,255) by the number of households with motor insurance (19.6m).²⁵
- For energy retail, we have estimated churn by dividing the number of residential property sales in the UK in 2012 (932,480) by the number of households in the UK in 2013 (26.4m).
- For mortgages, we have estimated churn by dividing the average number of first time buyers per year between 2006 and 2012

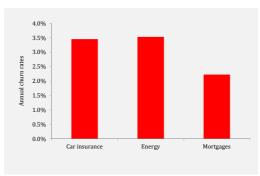
We note that these figures are not directly comparable: the switching rates do not include churn and the churn rates do not include switchina.

²⁵ Sources: Office of National Statistics, Association of British Insurers.

(251,314) by the total number of UK mortgages in 2013 (11.3m). 26

Our estimates are presented in the chart below. It shows that the churn rates are around 2-4% per year for these services, which are lower than the churn rates anticipated by HMT for the childcare voucher service.

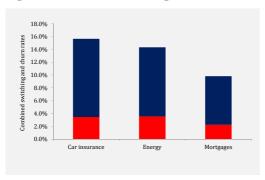
Figure 6: Annual churn rates



Source: Economic Insight analysis

The figure below shows the combined switching and churn rates for these services, to help arrive at an estimate of the proportion of customers that might be seen as 'contestable' by suppliers. It shows that the churn rate anticipated by HMT exceeds that for all of these services.

Figure 7: Combined switching and churn rates



Source: Economic Insight analysis and OFT

Given the above, we rate this test as GREEN. For the reasons set out above, we think that this feature of the market would help offset any competition risks associated with switching costs.

3.4.5. Summary assessment

The table below shows our summary assessment of how the TFC market performs against each of our tests.

The next section considers what effect the payment flows could have on competition in an open market from a demand-side perspective.

Table 3: Summary of tests

Test	Result
Test 1: Will there be triggers in the supply of tax-free childcare vouchers and what type will they be?	•
Test 2: Will information of sufficient coverage and completeness be easily accessible to consumers of tax-free childcare vouchers?	
Test 3: Is comparable information on different offers likely to be available?	
Test 4: Is the service inherently complex?	
Test 5: Are consumers likely to face actual or perceived switching costs?	
Test 6: Is the competition for 'new- to-market' consumers likely to protect 'existing consumers'?	

3.5. How payment flows could affect competition in an open market from a demand-side perspective

The Government has committed to "...deliver Tax-Free Childcare without parents paying fees that erode the value of the Government's support".

HMT is considering two options to help achieve this under the 'open market' model of competition:

- Option 1: Government pays voucher providers directly a 'fee' for the service they supply; or
- Option 2: Government pay parents an additional 'top-up' over and above the 20% contribution, which they could then use to pay voucher providers.

We have been asked to help HMT answer two questions:

- Which option is most likely to deliver competitive outcomes under the 'open market' model of competition?
- Which option is most likely to achieve the Government's commitment above?

The rest of this section sets out our analysis of how payment flows could affect competition in an open market and, in particular, its effect on the

Sources: Lloyds Banking Group, Council of Mortgage Lenders.

demand side of the market Overall, our view is that:

- competition is likely to be fiercer if parents pay a transparent fee for the voucher service because it may increase parents' willingness to seek out a good value service; and
- parents are more likely to pay a fee if Government gives parents a top-up rather than a fee to voucher providers because this means that voucher providers would have to find an alternative source of revenue to cover their costs.

Therefore, we think that there are competitionrelated reasons in favour of giving parents a topup. We note, however, that these are likelihoods not absolutes:

- giving parents a top-up does not guarantee that parents will pay a fee – voucher providers may choose to recover their costs in other ways (e.g. via the sale of other products and services or by reaching agreements with others in the supply chain, such as childcare providers); and
- effective competition could still emerge without parents paying a fee.

Accordingly we believe that it is appropriate to balance these competition considerations against other considerations, such as administrative practicalities.

We note that there is a separate issue, which is not addressed here, which is the appropriate size of the Government's contribution to the cost of voucher provision.

3.5.1. Analysis of the effect on competition

3.5.1.1. Standard theory

'Standard' microeconomic theory suggests that the option selected should not have any bearing on the competitiveness of the TFC voucher market (without any restrictions on what or how much voucher providers can charge their customers, we return to this point below). This is for the following reasons.

- » The competitiveness of a market is determined by: (a) the ease of entry and expansion by new and existing voucher providers; and (b) the ability and willingness of parents (and potentially employers) to switch between voucher providers.
- Whether voucher providers or parents receive Government funds does not affect (a) or (b) and so does not affect competition; (a) and (b) instead depend respectively on: (i) barriers to

- entry and expansion in the case of voucher providers; and (ii) the costs and benefits of one supplier over another in the case of parents and employers.
- » Take, for example, the situation where Government sets the 'fee' or 'top-up' so that it exactly equals the (efficient) cost of supplying childcare vouchers. Competition would take place and its intensity would be determined by the combination of (i) and (ii) above. If competition is very intense, providers could earn no more than the (efficient) cost of supplying childcare vouchers.
- » In this situation, if the Government paid parents, one would expect voucher providers to charge parents for the voucher account at a price equal to the top-up they receive. If Government paid voucher providers, one would not expect voucher providers to charge parents.

3.5.1.2. Variations on standard theory

Various aspects of the standard theory set out above have been challenged over the past decade or so.

In particular, some have argued that customers (here, parents) may take greater interest in the service they receive and so be more willing to shop around if they face an explicit price for it. Put simply, features of a service – here its price – is not just an outcome of the competitive process, but is a driver of it. This is consistent with some of the insights from behavioural economics outlined above.

This argument was raised in the context of the OFT's review of personal current accounts – that is, some commentators suggested that the 'free-incredit' model of banking in the UK contributed to a lack of competition and that it should be banned. See the quote below from the OFT's latest update.

"Some commentators have suggested that the freeif-in-credit model may have contributed to consumers' lack of engagement with PCAs. Possible reasons suggested are that consumers' undervalue the services provided because they consider them to be free, or that the lack of an upfront charge may reduce the ability of new entrants and the incentives for existing providers to compete effectively over price. While this might be true, at least to some extent, the OFT does not consider that this represents a strong reason at this time for forcing PCA providers to move away from this business model."²⁷

If the features of a service are drivers of the competitive process, as is consistent with the opinions of some regulators and competition authorities (and also some of the voucher providers that we have spoken to), then it would

OFT (2013), "Review of the personal current account market".

be beneficial from a competition perspective for HMT to select the option that is most likely to lead to parents being charged for the voucher provider service.

The argument set out in "Standard theory" above would suggest that Option 2 – paying parents an additional 'top-up' would be most likely to lead to parents being charged for the voucher service, and hence increase competition. That is, without revenue from Government fees to cover their costs, providers would need to raise revenues in other ways – one possibility is to charge parents for opening and or running their account.

However, this argument rests on the assumption that, in order to raise revenues, providers will charge parents for opening or running their account. The evidence from other markets suggests that might not happen. For example, providers could instead:

- recover their costs via other services sold to parents (e.g. add-ons to the core account); and/or
- recover their costs via 'hidden charges' (e.g. foregone interest on balances); and/or
- recover their costs from services supplied to others (e.g. advertisers, although we have heard that does not currently form part of voucher providers' business plans); and/or
- recover their costs from childcare providers (e.g. credit card providers charge merchants transaction fees rather than consumers).

Indeed, if price would have a significant bearing on a parent's choice of voucher provider, one would naturally expect voucher providers to try and avoid charging if they could and instead pursue alternative methods of cost recovery, such as those set out above. For the same reason, if Government decided to pay voucher providers directly and if voucher providers could recover their costs in the above ways, competition could lead to a form of price competition – i.e. competition between voucher providers to pay rebates to parents.

3.5.2. Analysis of the effect on meeting the Government's commitment

By allocating additional funds over and above the 20% contribution to the TFC market, the Government hopes to avoid the 20% contribution being eroded by fees.

- » For the reasons set out in "Variations on standard theory" above, it may not matter whether parents or providers are the recipients of the additional funds of itself.
- What matters more is whether the additional funds are sufficient to cover the cost of voucher provision. If the additional funds are too low, parents may need to pay to cover the difference under either Option 1 or Option 2. We say 'may' because for the reasons set out in

- "Variations on standard theory" above, providers could choose to recover their costs in other ways.
- » To the extent that competition drives down costs - and to the extent that payments to parents increases competition for the reasons set out in "Challenging the standard theory" there is an argument which says that a given level of additional funds is more likely to be sufficient to cover the cost of voucher provision under Option 2. Put simply, the argument is: paying parents creates more competition than paying voucher providers; competition drives down costs; lower costs makes it more likely that the additional funds will cover costs; and so this reduces the risk of the Government's 20% contribution being eroded. (This assumes that there are not additional administrative costs with paying parents over providers).

We also note that even if Government pays additional funds that are sufficient to cover the cost of voucher provision today (to either providers or parents), it does not preclude the possibilities that: (a) parents will have to pay more tomorrow (e.g. if the cost of voucher provision rises); or (b) providers will charge parents in any event - either for the core service or for other related services. Indeed, it seems to us difficult for Government to eliminate these possibilities (e.g. by banning charging for voucher accounts) without creating other significant problems, such as the risk of under-provision (e.g. if costs rise) or reducing innovation, such as the sale of add-ons (i.e. because it may be difficult to work out what part of the charge relates to the core service versus the add-ons).

3.5.3. Competition without explicit prices

A related issue is whether competition would be expected to work effectively if the market is designed or evolves in a way that means parents do not have to pay for their voucher account. That is, whether without an explicit price, the differences between the quality related dimensions of the service (outlined in above) would be too small or of insufficient interest for parents ever to invest time and effort, no matter how modest, in choosing the right supplier or switching to a better one.

Although this is theoretically possible, we are cautious about presuming that this is the case in relation to the TFC voucher market for the following reasons.

» First, as noted above, there is reason to think that there is scope for material service differentiation under the new arrangements. Furthermore, our discussions with voucher providers and the evidence from HMT's survey of providers and parents suggests that there are currently perceptible and important differences between voucher providers in terms of the service they offer. Indeed, we have

heard how competition has to date primarily taken place over service rather than price (although price is important).

- » Second, in the event that parents do not have to pay for their voucher account, the only mechanism providers have to win customers is to compete over quality (or potentially rebates). Since the churn rate is likely to be high (absolutely and relative to other markets), providers would seem to face strong incentives to differentiate themselves in this way, without the 'backstop' of a stable existing customer base.
- » Third, voucher providers have argued that an account's close connection with childcare provision and the ramifications of non-payment will mean that parents will take greater interest in it functioning well than they would for an account service that does not have this connection. Although there is little evidence that we can draw on to confirm or challenge this argument, we think it is an intuitive one.

3.5.4. Conclusion on payment flows

There are arguments in favour of Option 2 from a competition perspective and to achieve the Government's commitment. However, the arguments rest on a number of assumptions – particularly the manner in which voucher providers will choose to recover their costs. Since these assumptions may not hold in practice, our view is that the arguments in favour of Option 2 should be evaluated alongside other considerations (e.g. administrative costs and ease for Government, voucher providers, parents and so on).

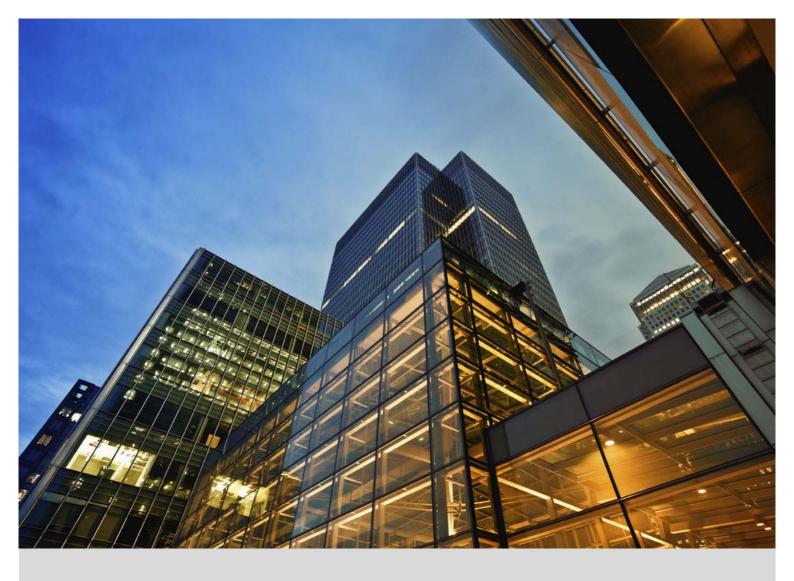
3.6. Conclusions and recommendations

Overall, we believe that there are good reasons to think that the demand-side of the TFC voucher market will work well compared to other markets.

We recommend that HMT should give consideration to the following initiatives that would further enhance the ability and willingness of parents and employers to switch.

- » First, Government should consider whether the registration and reregistration process could be used to capture useful information for newto-market parents, such as a simple 'rate your provider out of five' score that could then be disseminated to parents and other stakeholders to provide information transparency and support switching.
- » Second, HMT could consider sending a 'wakeup' letter to parents that are currently enrolled on an ESC scheme. The letter could notify them

- of their right to change childcare voucher provider and also their right to use a different provider to the one that their employer selects.
- » Third, HMT could consider whether anything can be done to help limit or eliminate the risk that parents would lose actual or entitled topups if they decide to switch to another employer.
- » Fourth, HMT could consider introducing a switching code-of-conduct, which sets out the responsibilities and timescales that employers and the in-going and out-going voucher providers should adhere to.



4. Supply side analysis

We set out our analysis of supply side issues relating to the likely functioning of competition under HM Treasury's proposed market models. We consider in turn: the investments suppliers might need to make in order to enter, likely minimum efficient scale, the scope for green field entry, and issues of vertical integration.

Our key findings and recommendations relating to our supply side analysis are as follows.

- (i) Empirical evidence shows that voucher provision is a very low capital intensive activity – and we believe that the new market is likely to be characterised by low entry barriers.
- (ii) We consider that the capital required for suppliers to serve the tax-free childcare voucher market is likely to be low; and in particular, existing suppliers are well placed to compete (although a mix of entry models could emerge, reflecting differences in relative B2B and B2C focus).
- (iii) Notwithstanding the relatively low capital requirements, evidence also suggests that access to finance would not be an impendent should it be required.
- (iv) There are, however, risks, as the characteristics of the new market will in part be a function of Government decisions. Government should take steps to minimise these risks.
- (v) Our supply-side analysis is generally supportive of the open market model, conditional on risks being managed.

4.1. Overview

As per the demand side analysis presented in the previous section, our start-point is to consider whether, absent any government intervention (or government organised competition for the market) we would naturally expect there to be vibrant competition on the supply side. If the answer to this is "yes", this would tend to suggest that the 'open market model' is likely to be preferred to the 'closed market model'. If the answer is "no", then the appropriate solution depends primarily on whether there are identifiable and practical policy tools that could be used to address any impediment to supply side competition. If there are, then an open market model might still be preferred, if underpinned by those tools. If not, then this could potentially lead one to prefer the 'closed market model'.

In order to apply the above approach in practice, it is necessary to examine a range of evidence to inform the likely supply side characteristics of the TFC voucher market. Here the three key considerations are:

- » Whether there might be barriers to entry, particularly in the form of 'sunk' investment costs.
- » Relatedly, whether there may be issues of 'access to finance' required in order to make the investments to support entry.
- » Thirdly, whether there may be issues of 'minimum efficient scale' that naturally limit the number of competitors that could plausibly be supported by the market.

In our view, an analysis of the existing supply base for ESC vouchers is a particularly useful way of addressing the above issues. This is for two reasons.

Firstly, notwithstanding the important changes arising under TFC (and in particular, the market being more B2C, rather than B2B, focused) the supply side characteristics of the existing market are likely to be somewhat similar to those for ESC. Or, in any event, even given the potential changes the existing market for voucher provision is likely to represent the best comparator for the new market. Consequently, an analysis of supply side rivalry within the ESC market may allow us to make inferences regarding competition for TFC voucher provision.

Secondly, in practice existing voucher providers may be well placed to enter the new market, and so an assessment of the practicality and commercial incentives for doing so provides direct information as to the potential scope for market entry. Related to this, during the course of our work we spoke to 5 existing voucher providers, all of whom indicated their intention to serve the new market (both in relation to employers and parents). This further reinforces the value of

understanding the entry incentives of current suppliers.

We also, however, give consideration to whether the scope for competition on the supply side might differ under TFC relative to ESC; and relatedly, therefore, whether alternative entry models (such as partnering models or pure green field entry) might emerge. Here, as we describe subsequently, a particularly important consideration is whether B2B or B2C segments might emerge within the TFC market, due – for example – to potential differences in their supply side characteristics. Here, by B2B segment we are referring the potential for suppliers in the new market to continue to target parents indirectly through their employers, whereas by B2C we are referring to the potential for suppliers to target parents directly, which will be particularly important in relation to new parents entering the TFC scheme. This issue merits consideration as, were there to be materially more onerous entry requirements for serving B2C, one might be concerned that this segment would be less well served under an open market model.

More generally, when considering the scope for new firms to enter the market (either on a partnering or green field basis), our view is that this is more likely to come from firms in either horizontally or vertically related markets to voucher provision, such as nursery chains. This is because, if considered in isolation, voucher administration might be deemed to be of relatively low value – and so the complementarity of related services may be important.

In relation to the above, however, it is important to keep in mind that the supply side characteristics of the markets in which potential new entrants operate in today could be very different to pure voucher account administration. For example, nursery provision is relatively highly capital intensive. Consequently, in many cases it is not clear that an analysis of issues such as: investment costs, scale economies or access to finance in such markets would allow one to draw any meaningful inferences regarding entry into the TFC voucher market. This is not to say that such comparators should not be considered; but, rather, we think the implication is that the existing voucher market represents an important reference point.

Consistent with the above, in the remainder of this section we set out in turn:

- An overview of the existing childcare market.
- Our assessment of the investment suppliers might need to make in order to enter the market for TFC vouchers.
- Our assessment of suppliers' likely ability to access the finance they might need in order to support any entry investments.
- An assessment of minimum efficient scale.
- The potential market entry models that could emerge.

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- A consideration of the implications of there being vertically integrated suppliers.
- Finally, our conclusions and recommendations relating to our supply side analysis.

4.2. The existing childcare voucher market

As discussed previously, there is an existing market for the supply of childcare vouchers under the ESC voucher scheme. Under the prevailing approach, voucher providers administer voucher accounts, where the core activities they undertake include:

- the collection of payments from employers on behalf of parents through salary sacrifice;
- the administration of payments to childcare providers;
- keeping employers informed of scheme rules and undertaking administration on the employers behalf (such as earnings assessment); and
- marketing schemes and explaining scheme rules to parents.

We understand that the Childcare Voucher Provider Association (CVPA) estimates that there could be between 30-40 providers of the existing ESC voucher scheme. However, previous analysis undertaken by HM Treasury identified 29 individual providers.²⁸ Details of the identified suppliers are shown in Annex A to this report.

In practice, voucher providers can belong to much larger corporate groups and may (directly or indirectly) provide a wider range of products and services than pure voucher provision. Other activities existing voucher providers might undertake include:

- provision of other employee benefits;
- managing workplace nurseries;
- providing financial services;
- the provision of other voucher type services;
 and
- other business to business services.

This diversity in activities means that it is hard to make comparisons with, but also hard to size, the existing market (for example, as some firms generate substantial revenues from activities unrelated to voucher provisioning).

Based on a review of the revenues and balance sheets of the 29 identified suppliers, we find that 8 are large corporates, 4 are medium sized firms and 17 are small firms.²⁹ The following table shows the 10 largest suppliers by revenue – which includes the 'big four' of: Computershare, Edenred, Grass Roots and Sodexo.

Table 4: 10 largest firms by revenue

Firm	Av. revenues over last 2 years (£000s)
The Mid Counties Co-operative	£686,507
Grass Roots Group (UK) Limited	£153,019
Asperity	£99,636
P&MM Employee Benefits	£69,581
Fideliti	£53,863
Kidsunlimited Group	£39,614
Computershare Voucher Services	£17,876
Childcare Vouchers Limited (part of Edenred Group)	£17,410
Sodexo Motivation Solutions	£6,653
Personal Group Benefits Limited	£6,050

Source: Economic Insight analysis of statutory accounts

As noted previously, it is important to emphasise that the companies identified often provide a much broader set of services than voucher provision. For example, the Midcounties Cooperative is involved in: food retail, travel, pharmacy, funeral services and energy in addition to childcare vouchers. Therefore, it is likely that only a small proportion of its revenues relate specifically to childcare voucher provision.

Of particular relevance to the assessment of the scope for supply side competition in the new market for TFC vouchers, we note the following:

- » Large Groups often act as parent companies to existing voucher suppliers, and so may be able to provide intragroup financing. For example, Motivcon Plc owns Allsave, My Family Care Vouchers and P&MM Employee Benefits.
 - administer schemes; and/or consultants or brokers of voucher provision.
- 29 Small firms are classified using the EU definition for micro-businesses, whereby turnover or balance sheet size is <2m Euros (£1.66m sterling). We have classified as 'medium size' firms with a turnover or balance sheet of up to £10m; and large firms as those with a turnover or balance sheet of >£10m.

The estimate of 29 is defined as corporate entities that administer childcare voucher schemes on behalf of employers. Note, for the purpose our study, we have not sought to independently verify the suppliers identified in the previous HM Treasury analysis, but rather have assumed that these accurately reflect the existing supply base. The difference between the 30-40 estimate and the 29 estimate could be due to the CVPA figure including multiple trading names of the same Group; and/or the inclusion of employers who self-

Additionally, some voucher providers are ultimately backed by major equity investors (such as Bain Capital), or large financial institutions (such as Barclays). Consequently, when considering what investments might be required to enter the new market – and firms' ability to finance those investments – ownership structure is a relevant factor.

» The existing supply base is characterised by a large number of small firms (17 out of the 29 suppliers), with annual revenues and/or balance sheets that are below £1.7m.
Consequently, one should consider the importance of these smaller providers to the functioning of competition in the new market.

4.3. Analysis of the investment requirements to enter the tax-free childcare voucher market

In this section we examine the potential investments firms may need to make in order to support entry into the TFC voucher market. We set out in turn:

- A description of the types of investments firms may need to make to enter the TFC voucher market.
- A comparator analysis of investments by voucher providers with investments in other markets.
- An analysis of historic entry investments by voucher providers.
- The views of existing suppliers as to what they would do differently under TFC and what their anticipated entry investments might be.

In addressing the above we draw inferences from the existing ESC market, but also use analysis to explicitly take into account how investments may differ under TFC.

4.3.1. Description of entry investments

The need to make substantial investment can act as a barrier to entry, particularly in cases where that investment is 'sunk' (i.e. cannot be recovered on market exit). At one extreme, sunk investment costs can be so substantial that it would be economically inefficient for multiple firms to incur these costs. This is often the case in 'natural monopoly' industries, such as water, which are characterised by large economies of scale. Due to these features, such industries are typically subject to price control regulation in place of competition.

³⁰ '<u>How Competitive Forces Shape Strategy.</u>' Harvard Business Review, Porter, (1979).

In relation to the market for TFC vouchers, economics first principles suggests that the need for significant, up-front sunk investment is likely to be minimal. The core activities associated with voucher provision (as described previously) primarily consist of payment handling, account administration, communications and marketing. These activities are, fundamentally, not capital intensive. Whilst clearly IT systems are necessary in order to support the portals / interfaces that allow stakeholders to manage accounts, many other of the required assets and capabilities can be obtained on a variable cost and / or leasehold type model. For example, the need to provide greater customer support, such as providing helpline access to parents, in the new market might require greater call centre capacity; but critically, this does not seem to imply capital investment (as firms can readily purchase access to call centre support through third party providers).

Nonetheless, we consider that there are likely to be two types of sunk investments, that existing providers *may* well have to incur in order to enter the new market:

» Incremental IT capacity and capability.

Under the options currently being considered by Government, voucher providers would need their IT systems to: (i) interface directly with HMRC in order to confirm that accounts have been verified (and deal with more stringent eligibility criteria); and (ii) interface directly with multiple parents (rather than with employers as is often the case at present). In principle, these changes may mean that firms need to make incremental IT investment in relation both to the 'backbone' underlying infrastructure and their 'front-end' portals.

» Marketing and brand. Due to the need to market more directly to parents rather than employers, we consider it likely the existing voucher providers wishing to enter the market would need to invest in their 'brand' or reputation.

There will, of course, also be costs associated with 'time and effort' required to support market entry.

The academic economics literature suggests that both of the above types of investment can be regarded as 'sunk', and so are relevant to a consideration of entry barriers. For example, specifically with regard to brand value, Porter's seminal (1979) paper³⁰ set out the theory as to why this should often regarded as a sunk cost in the context of building competitive advantage. Similarly Keil (1995)³¹ has described how IT investment is often 'sunk' due to managers making decisions regarding technology with a specific application or use in mind (which then

^{31 &#}x27;The effects of sunk cost and project completion on information technology project escalation.' IEEE, Keil (1995).

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creates a 'commitment' to persisting with the investment). Hausman (1998)³² has addressed the issue of sunk IT investment in the context of telecommunications markets.

More generally, both Schmalensee (2004).³³ and Rogerson (1987)³⁴ provide a discussion of the characteristics that define when an investment might be considered 'sunk', which is consistent with our view that – in this case – both IT and brand investment is relevant.



In principle, we also suggest that it is worth considering the potential working capital requirements of voucher providers in the new market (i.e. the need to hold 'cash' in order to manage differences in the timing of receivable payments and payments being made) and whether this might affect entry incentives. Although economic theory is more ambiguous as to whether working capital requirements should be expected to act as a barrier to entry, a number of

regulators have attached weight to this issue when considering market design. For example, in determining the appropriate market model for water retail in England and Wales, Ofwat has consciously chosen to minimise retail working capital requirements, stating that: "Payment terms are also important for the development of retail markets as they can act as a barrier to retail market entry." 35

Having identified that suppliers *may* need to incur some sunk investment in order to enter the new market, we need to consider what evidence and analysis can be used in order to inform the likely scale of that investment. We have developed two complementary analyses to inform this issue:

- a comparator analysis, in which we compare the general asset and investment intensity of voucher provision with other markets;
 and
- a historic entry cost analysis, in which we examine the actual scale of investments made by voucher providers to enter the ESC market.

Further to the above (and as noted previously) we spoke to a number of existing suppliers in the ESC voucher market, who gave us their views regarding the potential investment required to enter the market.

4.3.2. Comparative analysis

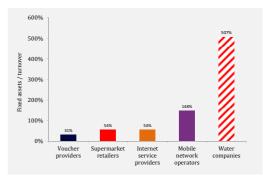
One way of considering the likely scale of investment that might be needed to enter the new TFC market, is to examine the existing asset intensity of voucher providers today, relative to other industries. That is to say, if the market for voucher provision today is relatively asset light (when compared to other industries) then it seems likely that market for TFC vouchers might also be asset light, indicating that the amount of incremental investment required to enter may be modest.

We have therefore calculated two ratios of asset intensity for the existing voucher providers:³⁶

- fixed assets / turnover; and
- capital employed / turnover.

For comparative purposes, we have then calculated the same ratios for a range of industries: supermarket retailers, internet service providers, mobile network operators and water companies. The rationale for this choice of comparators is that it allows us to examine the potential capital investment requirements of voucher providers relative to: (i) a natural monopoly industry (water) where there are substantial sunk capital costs; and (b) a range of industries that are generally considered to be competitive and where capital requirements may be more variable. The following two figures show the results of our asset intensity analysis.

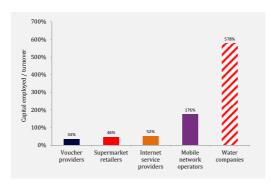
Figure 8: Comparison of fixed assets / turnover



Source: Economic Insight analysis of statutory accounts

- 32 'The Effect of Sunk Costs in Telecommunications Regulation.' MIT Conference paper, Hausman (1998).
- 33 'Sunk Costs and Antitrust Barriers to Entry.' The American Economic Review. Schmalensee (2004).
- 34 'The Dissipation of Profits by Brand Name Investment and Entry When Price Guarantees Quality.' Journal of Political Economy, Rogerson (1987).
- 35 'Payment terms between wholesalers and retailers a consultation.' Ofwat (2013).
- 36 Analysis is based on 17 firms out of the identified 29 for which profit and loss data was reported in their statutory accounts.

Figure 9: Comparison of capital employed / turnover



Source: Economic Insight analysis of statutory accounts

Our analysis shows that the current ESC voucher market has a low asset intensity, with a ratio of fixed assets / turnover of 31% and a ratio of capital employed / turnover of 34%. This compares to ratios of > 500% for water companies, 40%-60% for supermarket retail and ISPs, and around 150%-180% for mobile network operators.

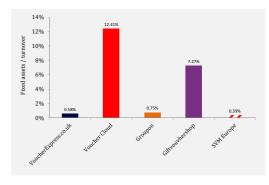
It is clear, therefore, that the existing market has relatively low capital investment requirements – even relative to industries that are considered to be competitive. If this is reasonably reflective of the likely asset intensity of the TFC market, this would suggest that the capital required to enter is likely to be low. Further, we note that given the analysis shown here, even if the TFC market is somewhat more asset intensive than the ESC voucher market, it is still likely to be of relatively low asset intensity compared to many other, competitive, industries.

Notwithstanding the above, one might be concerned that the capital intensity of existing voucher providers might be lower than that in the TFC voucher market. In particular, it could be the case that: (i) generally providers need to incur more marketing and brand investment to support their business model, due to the more B2C nature of the new market; and/or (ii) that if the increased brand and marketing investment requirements were directly linked to the B2C characteristics of the new market, that a distinct B2C segment might emerge, which could be less attractive to suppliers to serve. This, in turn, might mean that one would be concerned about the extent of provision and/or competition in that segment (which would seem to be more pertinent to an open market model, as under a closed market model Government could, in principle, mandate the requirement to serve B2C).

To address this, we examined the capital intensity of mainstream online voucher or gift card providers in the UK, all of whom have significant consumer facing brands. ³⁷ The results of this are shown in the following chart (note, we also

subsequently provide information regarding the actual anticipated investment spend potential entrants anticipate having to make).

Figure 10: Fixed assets / turnover



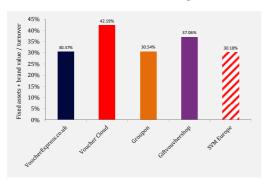
Source: Economic Insight analysis of statutory accounts

Our earlier analysis showed that the average ratio of fixed assets to turnover in the ESC market was 31%. The above analysis in relation to mainstream voucher providers shows that their capital intensity is actually *even lower*. Of course, one limitation of the above is that the true brand value of the mainstream voucher / gift card providers may not be capitalised (i.e. reported as an intangible asset in the accounts), and thus the comparative capital intensity identified above may not fully reflect the differences in brand investment between a B2B and B2C environment.

To address the above limitation one could, in principle, seek to capitalise the operating costs of the firms that relate specifically to marketing. However, the notes to the companies' accounts do not itemise marketing spend. Nonetheless, in order to provide an illustration of the potential level of brand investment made by the firms, we have assumed that 100% of all administrative expenses reported in their accounts relate to marketing (this is the theoretical maximum that marketing spend could be). We have capitalised this by taking a 20 year present value at an assumed pre-tax nominal WACC of 10% to give an approximation of the value of invested brand capital – and thus re-calculated the fixed assets / turnover ratio including brand value (see chart).

Although of the identified firms, SVM appears to be primarily B2B.

Figure 11 Fixed assets + brand value / turnover - mainstream voucher providers



Source: Economic Insight analysis of statutory accounts

Our analysis shows that, once brand value is fully capitalised the ratio of fixed assets to turnover increases substantially, and is 31% on average (revenue weighted). Importantly, this is the same

as the fixed assets / turnover ratio for existing ESC suppliers.

In short, our analysis indicates that, even when one examines B2C firms and takes a relatively aggressive approach to the capitalisation of marketing spend, the level of investment (including brand investment) required to support voucher services does not appear to be prohibitive. Referring back to the potential differences between the TFC and ESC markets set out at the start of this section, therefore, we note that: (a) the level of potential

incremental brand investment implied by the market being more B2C in nature does not necessarily appear to be substantial; and, relatedly; (b) this would seem to somewhat mitigate the concern that a separate B2C segment might emerge and that this segment would not be sufficiently well served to ensure that consumers faced effective choice.

"Our analysis indicates that, even when

capitalisation of marketing spend, the level

investment) required to support voucher

services does not appear to be prohibitive."

one examines B2C firms and takes a

relatively aggressive approach to the

of investment (including brand

Interestingly, the above mainstream voucher providers were all largely equity funded. Similar to existing ESC voucher providers, this is consistent with an asset light business model – and so provides further evidence that the TFC voucher market is unlikely to require any substantial capex.

There are, of course, a number of caveats associated with the above. Firstly, we have only examined the financials of five mainstream

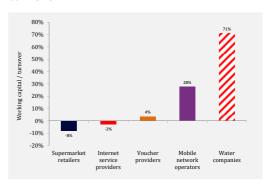
In particular: the VoucherCloud brand is owned by
Invitation Digital, the Voucher Express brand is owned
by Hemmingway (a retailer) and the Groupon brand is

voucher / gift card firms, and so the above may not be representative of all mainstream voucher providers. Secondly, as per the ESC voucher market, the firms we have analysed often undertake a range of activities beyond pure vouchering. For example, we excluded Wowcher for this reason, as it is owned by Daily Mail Group. Consequently, there is a risk that the required capital investment required to support entry is higher than indicated here. We address this uncertainty subsequently in our discussion of potential entry models.

4.3.2.1. Working capital

In addition to considering fixed asset intensity, it is worth considering the potential working capital requirements of voucher providers (as noted earlier, working capital requirements have been cited as a potential entry barrier in other markets). Similar to our fixed asset intensity analysis, we have, therefore, calculated the ratio of working capital to turnover for existing voucher providers and compared this across a range of industries, as shown in the following figure.

Figure 12: Comparison of working capital / turnover



Source: Economic Insight analysis of statutory accounts

Our analysis shows that the current voucher providers have relatively modest working capital requirements. As per the fixed asset analysis therefore, should this be reflective of the working capital requirements for the supply of TFC vouchers, it would seem to suggest that this should not represent any impediment to them entering the new market.

In relation to the above, however, it is important to understand that the working capital requirements of providers of TFC vouchers will themselves be a function of the precise payment terms and flows that are ultimately put in place under the new scheme. For example, they will turn on: (i) the payment period for top-ups from Government; (ii) the payment periods from voucher providers to childcare providers; and (iii) the average time between parents making

operated by MyCityDeals. The analysis relates to the relevant company, not the brand.

payments in and choosing to make draw-downs from the account.

4.3.3. Historic entry cost analysis

Another way of considering the potential incremental entry costs that existing providers might incur in accessing the new TFC voucher market is to examine the investments they made *historically* in entering the ESC voucher market.

In practice, specifically identifying the relevant investments made to support entry is complicated by the fact that: (i) as noted previously, existing providers may undertake a range of activities, and so not all of the investment may be specifically related to voucher provision; and (ii) it is not always possible to accurately identify the date of market entry for each provider.

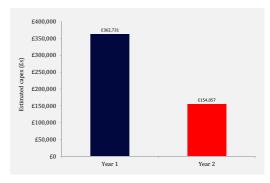
We have, nonetheless, undertaken an analysis of historic entry costs, using the following methodology.

- » Firstly, starting from the 29 existing providers identified in HM Treasury's analysis, we accessed Companies House records to determine the date from which accounts were first filed.³⁹ We then assume that this approximates the date of market entry.
- We then sought to estimate the capital investment (capex) made by each player in the first two years of entry, by examining additions to the fixed asset register as shown in the notes to the firms' statutory accounts, as follows:
 - In year 1, capex is estimated as being 'gross fixed asset additions in year' plus 'the net book value in the prior year' 40
 - In year 2, capex is estimated as being the 'gross fixed asset additions in year'.

Based on the above approach, the following chart shows the mean estimated capex spend of existing players incurred in year 1 and year 2 of market entry.

We were able to identify relevant information for 26 of the 29 identified firms.

Figure 13: Mean Year 1 and Year 2 capex spend

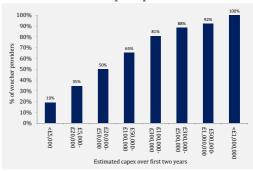


Source: Economic Insight analysis of statutory accounts

Our analysis shows that, on average, existing voucher providers incurred capex of £363k in year 1 of market entry and £154k in year 2. This suggests that the upfront costs borne by providers in order to enter were relatively low.

In practice, however, there is considerable variation across existing players with regards to the investments made in order to enter. In particular, the averages above are in part driven by the fact that a small number of players made relatively substantial investments. In order to illustrate this, therefore, we calculated the distribution of the total capex (over Year 1 and Year 2 of entry combined) across the existing players, which is shown below.

Figure 14: Cumulative distribution of mean Year 1 and Year 2 capex spend



Source: Economic Insight analysis of statutory accounts

The distribution analysis above shows that 81% of existing players incurred an estimated capex of less than £300k over the first two years of entry; and for 65% of firms, capex was below £100k.

The existing providers with the largest estimated capex in our analysis were Kidsunlimited (estimated capex of C. £10m) and Computershare (estimated capex of C. £1.2m).⁴¹ In relation to

- might have purchased an existing firm (or its assets) on incorporation.
- Note in this analysis Kidsunlimited refers to: Kidsunlimited Group Limited (no 06481383) for which accounting records are first available from 2009. There are two related companies: Kidsunlimited Vouchers Limited (which is listed as a dormant company) and Kidsunlimited Limited (which is the nursery business).

Noting that, because we are starting from the first period for which accounts are filed, the net book value in the prior year is typically zero. However, in some cases a value is shown in the accounts. We consider it appropriate to include this within our estimate of year 1 capex, therefore, as it might imply that the company

these, the statutory accounts from the relevant time period indicate:

- » Kidsunlimited also operates nurseries and was undertaking significant capital investment to support the opening of new facilities. Clearly this is irrelevant to the question of what capex might be required to support entry into vouchers.
- » Computershare (which was BusyBees Childcare Vouchers in 2005, the date for which full accounting records are first available) was, however only involved in the provision of vouchers services at this time. The accounts from this period describe investment being made in IT and Web interfaces to support the voucher business. This suggests that this represents a more meaningful benchmark.

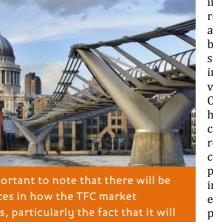
In summary, our analysis of historic entry investment implies that:

- Investment to enter the ESC voucher market was relatively low, with the vast majority of providers incurring capex of less than £300k.
- Although a small number of providers invested more material amounts, of these the most relevant comparator was Computershare (BusyBees), which invested

just over £1m implying that this represents an approximate upper bound for investment specifically relating to initial entry into ESC voucher provision. Our analysis of historic entry costs can be used as a reference for considering the investment costs existing voucher providers may need to incur in order to enter the TFC voucher market. We have therefore undertaken a "what if" analysis, whereby we show the implied

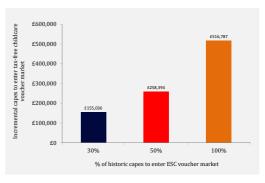
potential incremental

incremental capex required to enter the new market, were one to assume that those investments would be equal to: 30%, 50% and 100% of the total cost of entry into the existing ESC vocher market. The results of this are shown in the following figure.



"It is important to note that there will be differences in how the TFC market functions, particularly the fact that it will be far more consumer facing. Consequently, an additional important piece of evidence is what actual potential entrants consider they may have to invest

Figure 15: "What if" analysis of incremental capex spend to enter TFC market



Source: Economic Insight

The above would imply that, on average, the upper bound for the investment existing suppliers might need to make could be C. £500k (although it could be higher or lower for individual firms). At 30%, the figure would be £155k and at 50% it would be C. £250k.

Whilst in practice, there is no objective basis on which we can link future incremental capex to historic entry costs, the above provides an indicative view as to the potential range of investment that suppliers may need to make. Consistent with the generally asset light nature of voucher provision (see previous analysis) this indicates that the likely capital investment required by to enter is likely to be low.

4.3.4. Views of existing suppliers

The preceding empirical analysis provides an assessment of likely entry capex into the TFC market based on a range of data. It is, however, important to note that there will be differences in how the TFC market functions, particularly the fact that it will be far more consumer facing.

Consequently, an additional important piece of evidence is what actual potential entrants consider they may have to invest in order to enter the new market. Across the voucher providers we spoke to, there was general agreement that the two main types of investment required to support entry into the TFC market would be:

- IT infrastructure; and
- marketing and brand.

Most providers we spoke to stated that total incremental capex to enter would be in the range of £100k to £500k, which is broadly consistent with the analysis set out previously. One supplier suggested capex could be higher, at between £1m to £3m, however. The providers were keen to emphasise that for them, it was hard to precisely estimate entry investment at this stage as the design of the new scheme is uncertain. Relatedly, a common risk identified by the providers was the uncertainty regarding how their systems would

BusyBees Childcare Vouchers Limited (no 4968447) was subsequently acquired by Computershare Vouchers

Limited. Full accounting information first available from 2005.

need to interact with Government / HMRC, which would be a key driver of total IT investment.

"We think total entry investment to enter will probably be around £100k." - Existing supplier

In terms of the nature of IT investment, it was widely agreed that the systems relating to payment handling and processing were largely likely to be fit for purpose. Therefore, any incremental spend is primarily driven by front end (e.g. portal) requirements and interfacing with Government.

There were more mixed views on the total potential scale of marketing investment. Also, in some cases, providers saw this more from the perspective of an on-going operating cost, rather than up-front capex. This range of views most likely reflects relative differences in the strength of providers' existing brands in the consumer space. Clearly those with a more established consumer facing brand would require a smaller level of spend than those with little to no existing consumer presence.

Importantly, none of the suppliers we spoke to indicated that they viewed the B2C segment as being separate from B2B, or that the incremental marketing spend they were anticipating making would deter them from serving B2C. In fact, the incremental spend they expected to make in relation to marketing and brand was precisely because the suppliers did anticipate serving this segment of the market (i.e. if they were not intending to service this segment, they would not have to consider any material change in marketing expenditure).

Although we only spoke to a small number of suppliers, their views were extremely helpful; and in particular were strongly consistent with the other evidence we have reviewed in that: (i) they believe that the incremental capex for them to enter the new market is likely to be low – subject to the risk regarding Government IT interfacing; (ii) the levels of capex they anticipate investing are broadly consistent with those implied by our empirical analysis, which provides grounds to suppose that the analysis is indicatively correct; and (iii) relatedly, existing providers believed that they were well placed (and therefore likely) to serve the new market.

4.4. Access to finance

As noted previously, in principle 'access to finance' can be an independent both to market entry and supplier expansion. Therefore, in addition to analysing the amount of investment firms might need to make, it is also relevant to consider their ability to raise the capital needed to make those investments.

In the present case, however, the above must be considered in the context of the evidence and analysis set out in the preceding section, which

indicates that: (i) voucher provision is generally an asset light activity; and (ii) that the historic investment required to enter has been low. Consequently, our view is that 'access to finance' is not an issue that merits detailed consideration in this instance. In the following, therefore, we set out a short analysis of access to finance for voucher provision.

In principle, voucher providers could access capital through: (i) borrowing from debt markets; (ii) raising equity; (iii) funding out of revenue; and/or (iv) intra-group borrowing. The extent to which providers can access finance through these channels will depend on a wide range of factors, such as their underlying financial performance and their organisational structure.

With regard to debt finance, we note that this has not historically been an important issue within voucher provision. This is because, consistent with the asset light nature of the business, many suppliers are funded either entirely - or to a large extent – by equity. Nonetheless, in the event that the TFC voucher market might require additional investment, access to debt markets may become more relevant. For this reason it is helpful to consider what criteria potential lenders (and relatedly, credit rating agencies) might use to determine whether to provide debt finance. Although the precise factors (and weight attached to specific factors) of relevance can vary by industry and lender, the key financial metrics typically assessed include:

- » Profitability. Measures such as EBIT, EBITDA and ROCE.
- » Liquidity. Measures of a firm's ability to pay short-term debt. A key ratio is current assets / current liabilities.
- » Capital structure and capital adequacy. Measures of the extent to which a firm is finance through debt, versus equity (i.e. gearing) and measures such as total liabilities / total assets.

We have calculated a range of financial metrics for existing voucher suppliers. For each of these we have compared them to an assumed benchmark, which represents the criteria a potential lender *might* apply. This analysis is based on financial data averaged over the last two years for which company accounts are available (typically 2011/12 and 2010/11). The results are summarised in the following table.

Table 5: Key financial ratios

Parameter	Assumed benchmark ⁴²	Industry average	% of suppliers meeting criteria
EBIT	>3.0%	4.4%	53%
ROCE	>10.0%	13.1%	82%
Current assets / current liabilities	>1.0	1.1	71%
Total liabilities / total assets	<1.0	0.8	75%
All bench- marks			47%

Source: Economic Insight

The above analysis indicates that, across the industry as a whole, financial ratios are generally consistent with the ability to access debt finance – given our assumed benchmarks. With regard to individual firms, we find that just under half of existing voucher providers meet all of our assumed benchmarks, and so might be considered to be of lowest credit risk. Put another way, were the new TFC voucher market to require substantial sunk investment, for which debt finance might need to be raised, we suggest that around half of all existing suppliers may be able to do so. However, as we do not know precisely what criteria lenders would apply in practice, the above is, of course, subject to uncertainty.

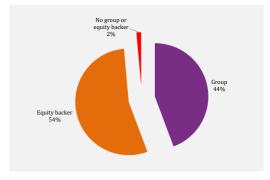
As noted previously, in addition to access to debt markets, firms can finance investment: (i) through intra-group loans; (ii) through equity; and / or (iii) out of existing revenues. As operating margins are generally 'thin', in practice we consider that finance via Group or equity are more likely (although as noted subsequently, some providers we spoke to indicated that financing out of revenue was possible).

To assess the ability of existing suppliers to access finance through these channels we reviewed previous analysis commissioned by HM Treasury, which identifies voucher providers' ultimate parent companies. This shows that, of the 29 identified firms, 16 are either part of corporate groups or are backed by external equity investors. Thus the remaining 13 firms are not either part of a group or backed by equity. In other words, more than half of the existing suppliers may be able to access either intra-group or equity finance.

Note the benchmarks used here are for illustrative purposes only. In practice individual lenders would apply their own criteria when considering the case for debt finance. Note, with regards to EBIT and ROCE measures, base is out of 17 firms for which P&L data is

Rather than consider firm numbers, we think it is also helpful to examine the proportions of capital currently invested in the industry that are subject to either Group or equity backing. We therefore calculated the percentage splits of capital employed (averaged over the last two years) by: group backing; equity backing; and no group or equity backing. The results are shown below.

Figure 16: % of industry capital employed underpinned by Group or Equity backing



Source: Economic Insight

This shows that the vast majority of capital employed in the ESC voucher market (98%) is subject to either group or equity backing. A potential implication of this is that, were the new TFC voucher market to require materially more incremental investment than evidence currently suggests, access to intra-group or equity finance could be made available to support it.

Consistent with the above, none of the existing voucher suppliers were concerned with access to finance, given the relatively modest capex requirements. A number told us that, at their anticipated levels of investment required to enter TFC, they would fund out of revenues, or from intra-group loans.

"We wouldn't need to borrow externally to finance the investment." - Existing supplier

In summary, with regard to access to finance we find that:

- This is not generally a material issue, given the low levels of capital required in order to serve voucher markets.
- Notwithstanding the above, existing providers are generally well placed to access additional capital should it be required in order to enter the TFC voucher market.
- That firms backed by large group entities may be at an advantage in relation to their access to raise finance through equity and/or intragroup loans.

available. Liquidity and debt ratios are out of 29 firms. Overall percentage across all benchmarks simultaneously is out of 17 firms.

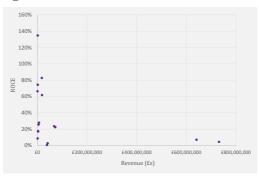
4.5. Minimum efficient scale

In addition to the issue of sunk investment costs, it is necessary to consider the extent of any economies of scale associated with providing TFC vouchers. Indeed, and as noted earlier, if such economies of scale were substantial, this might provide a rationale for a 'closed market model', whereby Government would effectively determine the number of players in the market, so that it could ensure that the fixed costs of supply were recovered.

In relation to this matter, our first observation is that there is currently a relatively large number of suppliers in the existing ESC voucher market. As noted earlier in this report, these suppliers are of varying sizes, but the majority are small firms. This would not seem to be particularly consistent with voucher markets being characterised by material scale economies.

To further examine this issue, we calculated the correlation between revenues (a measure of size) and ROCE (profit) across existing suppliers over the two most recent years for which accounting data is available, as shown in the next chart.

Figure 17: Correlation of scale and returns



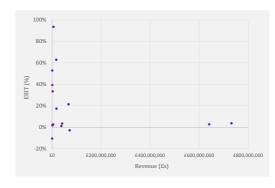
Source: Economic Insight

The scatterplot shows no clear pattern between revenue and ROCE, and the correlation coefficient is negative, at -0.35, which could be more consistent with diseconomies of scale. In our view, it is somewhat unlikely that there are diseconomies of scale in the provision of vouchers, and note that the negative correlation could reflect a number of factors, including small sample size. Nonetheless, the above analysis would, at the least, appear to call into question whether there could be any material economies of scale.

We further examined the correlation between revenue and % EBIT margins across firms, as shown in the following chart.

Assumes 1.7 children per eligible family, consistent with latest ONS estimates. See: 'Family size in 2012.' ONS (March 2013).

Figure 18 Correlation between scale and margins



Source: Economic Insight

As per the ROCE correlation, the correlation between revenues and EBIT margins was negative, which is inconsistent with there being material economies of scale in voucher provision.

4.5.1. Minimum scale financial model

In practice it is important to consider that the potential number of players in the market will ultimately be a function of the fee income that voucher providers receive. In the current ESC market, fee income is typically expressed as a % of voucher value, and existing providers tend to earn fees in the region of 2%-5%. In the new TFC voucher market, it is possible that providers could levee a fee directly on parents, or alternatively, Government may choose to make payments to the providers. In any event, the total value of the market – and thus the number of firms that may be supportable – will critically depend on the exact payment structures and levels that emerge.

To examine this issue, we constructed a forward looking financial model, which evaluates the case for market entry into the TFC voucher market for a representative firm. We then use the model to calculate the minimum fee level required for entry to be viable, where we vary the number of assumed players in the market. The key assumptions of the model are as follow:

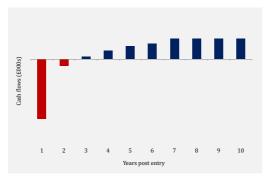
- » Total voucher market size is based on HM Treasury's forecasts of eligible families, multiplied by an assumed number of children per family, multiplied by a Government contribution of £1,200 with a parental contribution of £4,800. As these are the maximum contributions that can be made, this provides an upper bound for total voucher value.⁴³
- » To then calculate the total revenues to be shared between voucher providers, the market voucher value is multiplied by an assumed % fee rate (which the voucher providers are

assumed to charge or receive). In our model, this is 'solved for' to calculate the required % fee rate to breakeven.

- Total voucher provider market revenues are divided by the assumed number of players to give the average revenue per firm.
- » The average firm costs are then calculate as follows: (i) cost of goods sold is calculated as a % of turnover, based on the average % COGS of current suppliers in the latest year for which accounting data is available; (ii) administrative costs (assumed to be fixed) are calculated based on the average absolute value of these costs for existing suppliers in the latest year for which accounting data is available (although we also vary these assumptions to reflect potential differences between the TFC and ESC voucher markets).
- » As we need to calculate cash flows, depreciation and amortisation charges are added back – these are calculated by applying an assumed asset life of 20 years to the modelled capex (see below).
- » Finally, entry capex is based on the analysis described earlier, whereby we take the actual average Year 1 and Year 2 capex figures based on historic entry, then apply an assumed run down rate.
- » The above calculation steps then give us projected cash flows for the average firm over 10 years, from which we calculated the net present value of entry using an assumed nominal discount rate of 10%.

The following chart illustrates the profile of a voucher firm's cash flows associated with entry into the TFC voucher market, as generated by our model.

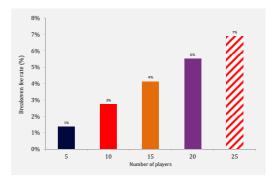
Figure 19: Illustration of projected cash flows



Source: Economic Insight

We then use the model to calculate the minimum percentage fee rate required for entry to be profitable, where we vary the assumed number of firms in the market. The results of our modelling analysis are shown below.

Figure 20: Breakeven fee rates by no of players



Source: Economic Insight

The first thing to note regarding the above is that the implied fee rates are broadly consistent with those observed in the ESC market today, suggesting that the results are plausible. In headline terms, the modelling implies that, if the overall value of the TFC market is broadly similar to the prevailing value of the ESC market, then one would still expect there to be a multitude of suppliers.

The modelling also illustrates a further important point: namely, that the scope for entry is itself a function of the fee rates, which can be influenced (or indeed, could be directly set) by Government as part of its overall market model design. However, in interpreting the above results it should be made clear that our analysis is insufficient to draw any direct conclusions regarding the exact level of fee rates required to support a certain number of players. This is because we have not assumed that there is any scalability of entry costs with firm size, which is unlikely to be the case in practice (but the available data is too limited for us to make any robust assumptions regarding scalability).

Further to the above, it is important to be mindful of the fact that the above analysis is largely informed by cost structures that exist in the ESC voucher market today. In practice, of course, the cost structure for the TFC market may be somewhat different, especially given increased focus on end consumer interactions. Consistent with this, a number of voucher providers told us that they believed that their ongoing costs of goods sold would be somewhat higher than is currently the case.

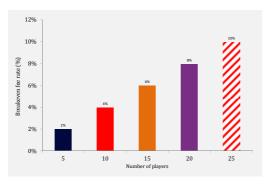
"Our costs of goods sold could be much higher going forward. For example, we may have to pay commissions to nurseries to drive acquisition." – Existing supplier



"Even if operating costs are materially higher in the TFC voucher market relative to the ESC voucher market (reflecting the former's B2C characteristics) it is likely that a sufficient number of players would be viable to ensure effective competition."

The challenge, however, is that there is not currently any robust evidence that would inform us as to by 'how much' ongoing costs could increase in the TFC voucher market. However, to reflect the fact that there could be important differences in ongoing costs relative to the existing market, we used our model to reevaluate minimum efficient scale assuming the costs of goods sold are 50% higher than is currently the case (i.e. a substantial increase). The results are shown below.

Figure 21: Breakeven fee rates - higher COGS



Source: Economic Insight

Regarding the above, assuming that COGS are 50% higher than in the ESC voucher market, the fee rates required for entry to be viable range from 2% of voucher value at 5 players, up to 10% for 25 players. Again, however, we should caution that our analysis is insufficient to draw any direct conclusions as to the exact level of fees required to support a certain number of players. What the above analysis does show, however, is that even if operating costs are materially higher in the TFC voucher market relative to the ESC voucher market (reflecting the former's B2C characteristics) it is likely that a sufficient number of players would be viable to ensure effective competition.

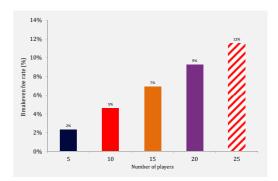
Finally, as noted previously, in principle one might be concerned that the incremental investment in brand in marketing required specifically to serve B2C might mean that a separate B2C segment emerges, and that this might be less financially attractive from an entry perspective. In relation to this, we note that evidence set out previously in this section would tend to suggest that the above should not be a material concern (for example, we noted that the capital intensity of mainstream voucher and gift card providers with substantial

B2C brands was no higher than that of existing ESC voucher providers, even when brand value is capitalised). Notwithstanding the above, we have developed a scenario in which the entry investment is increased to reflect the capitalised value brand value of marketing and brand spend. In order to estimate this we have calculated an estimated marketing spend 'bottom up' based on the following assumptions:

- » That the entrant would use direct mail and would target all families taking up TFC (the annual cost of this has been estimated based on Royal Mail's list price for marketing mail).
- » That the entrant would also use TV advertising and would advertise on terrestrial TV 50 times pa (the cost of this has been estimated using ITV's list prices).

In both cases the total spend has been capitalised over 10 years with an assumed discount rate of 10%. We have further assumed that the COGS are 60% higher than in the base case, to reflect the fact that the B2C segment may be somewhat more resource intensive. The results of this B2C entry scenario are shown below.

Figure 22: B2C entry scenario



Source: Economic Insight

The results show only a slight increase in the implied fee rates required for entry to be viable. This is consistent with a range of evidence set out previously and indicates that we should not be unduly concerned regarding the incentives for serving the B2C segment. However, we should also stress that the input assumptions underlying this scenario are *highly uncertain*, and as such the analysis should be regarded as illustrative and stylised only.

In summary, regarding minimum efficient scale, we believe the key considerations are as follows:

Description Suggests Sugges

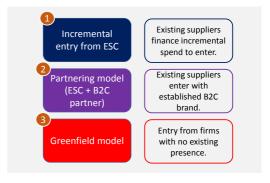
- » However, it has not been possible, within the scope of our work, to undertake a detailed statistical analysis of economies of scale – and so the above is subject to a relatively high degree of uncertainty.
- » Consequently, if Government considered that there is a risk that economies of scale are more material than suggested here, we would recommend considering the following options:
 - to err on the 'high' side when either setting or seeking to influence the % fee rates that voucher providers receive; or, alternatively
 - to examine options for 'two-part tariff' fee structures, whereby voucher providers could receive both a 'lump sum' and 'variable fee' amount, as this would assist in fixed cost recovery.

Finally, when considering the number of supportable players in the market, we should emphasise that the scope of our work has been limited to considering the implications for the effectiveness of competition. We understand that, in practice, there may be other important policy decisions. For example, if certain existing players were to close, whether public or private money would be at risk.

4.6. Potential entry models and the scope for green field entry

The preceding analysis is largely consistent with the TFC market having relatively low barriers to entry and expansion, and so from a supply side perspective, these would seem to be good scope for competition. Nonetheless, given the uncertainties inherent in analysing a market that does not yet exist, it is helpful to consider from a practical perspective, how firms might enter the market. In doing so, we take into consideration whether the attractiveness of entry might vary sufficiently across the B2B and B2C segments to affect the relative viability of the potential models. We believe there are three main types of entry model.

Figure 23: Potential entry models



Source: Economic Insight

- » Incremental entry. This refers to entry by firms currently supplying vouchers under the ESC market. This model of entry would require those firms to finance any incremental up-front investment in IT and marketing. As described previously, although there will be important differences between the existing ESC voucher market and the TFC voucher market, some important aspects of the voucher providers' role will remain unchanged in particular the skills and capabilities required to manage accounts and payments between stakeholders. There are a number of reasons to suppose this form of entry model will be attractive:
 - To the extent that some historic investment made by existing firms is sunk (e.g. IT to support voucher accounts) firms would have to 'write off' those assets were they to close or exit voucher provision – thus there is a natural incentive for them to serve the new market.
 - They have many of the skills and capabilities required to serve the new market.
 - The extent of any incremental investment may well be modest and could be financed readily. Marketing investment could be mitigated by focusing on employers, rather than parents in some cases.
 - All the existing providers we spoke to indicated that their objective was to serve the new market.
- Partnering model. Although a range of evidence set out here suggests that entry investment could be limited, it is important to recognise the uncertainty that exists in this regard. Consequently, we suggest that existing voucher providers might consider partnering with firms with established B2C brands. This model might be attractive if:
 - The level of brand investment required is more substantial than is currently anticipated.
 - Other routes to building customer bases (e.g. targeting employers) are ineffective.
 - There are economies of scope across horizontally related activities.

Evaluating alternative market models

- » Greenfield model. Finally, it is possible that new firms may choose to enter the TFC voucher market on a pure green field basis. We think it is likely that any such entrants would be in vertically or horizontally related markets and could include: large nursery chains, mainstream voucher providers (such as VoucherCloud or Wowcher), e-money providers, financial services firms and retailers. There are three primary reasons to suppose such green field entry might occur:
 - Generally the evidence we have reviewed is consistent with there being low barriers to entry and expansion.
 - For many voucher providers, childcare voucher administration is not their core business activity. This is consistent with there being a high degree of complementarity between childcare voucher provision and other business support services (in particular, the provision of wider employee benefit).
 - The types of investment that may be required to enter could potentially be leveraged off existing investments – particularly in relation to brand and marketing, for example.

Of the three entry models identified above, we suggest that incremental entry by existing suppliers is likely to be the most prevalent. In particular, to the extent that the existing ESC voucher market is well served, this would naturally seem to somewhat limit the scope for large scale new entry.

Nonetheless, to the extent that there are uncertainties regarding the precise nature and size of investments required to support entry, the possibility of partnering and green field entry models provide further reassurance regarding the scope for supply side competition. In particular, we think that – in the event that substantial brand investment was required to underpin entry, in line with the more B2C nature of the new market partnering models would seem to represent an attractive solution. Here the matching of an existing voucher provider (with the skills and assets required for account and payment management) with an established B2C brand (such as a nursery or mainstream voucher provider with direct communication channels to parents) would seem to be the most natural outcome. The scope for these models would seem to mitigate concerns regarding: (i) brand investment being an impediment to entry; and (ii) whether a separate B2C segment might emerge, which might ultimately be under provided for.

As noted in the introduction to this section, the characteristics of vertically or horizontally related markets may be substantially different from those for the TFC market. Therefore, it is difficult to draw inferences regarding entry costs into TFC for firms operating in such markets based on an

analysis of their current costs, pricing, profitability and investments.

However, we do think that the activities undertaken by mainstream voucher providers could be sufficiently similar to those that TFC voucher providers would have to undertake in the new market to provide some helpful evidence. In particular, by definition such voucher providers need to have large consumer facing brands, which is an important feature of the TFC voucher market (and one not reflected in the ESC voucher market). For this reason, we used these as a comparator in our earlier analysis.

Finally, it is important to consider the above entry models in the context of the overarching question we are seeking to address: whether an open or closed market model is most appropriate in relation to the TFC voucher market. In this regard, we note that, even absent green field or partner based entry, the existing voucher supply base should be able to provide sufficient competition within the TFC market from a supply side perspective.

4.7. Issues of vertical integration

In assessing the relative merits of alternative market models for TFC vouchers, a potentially relevant consideration is the fact that a number of existing voucher providers are 'vertically integrated' in the sense that they also participate in the provision of childcare (i.e. through the ownership of nurseries). Thus one might also expect the supply for TFC vouchers to be similarly characterised by a degree of vertical integration.

Economic theory suggests that, under certain conditions, vertical integration can act as an impediment to competition on the supply side. However, this issue is not straightforward and the actual impact of such integration is case specific. For example:

- » On one hand, a firm operating in both an 'upstream' (input) market and a 'downstream' (retail) market might have some commercial incentive to exclude rival retailers from the downstream market, in order to increase its market power (and therefore profits) in that market.
- » On the other hand, by excluding such rivals from the downstream market, the firm is potentially reducing the overall value of its sales in the upstream input market. Therefore, the strength of the inventive to engage in anticompetitive behaviour depends on a balance of factors.

The above issues have been considered at length in the academic literature. In particular, see Hart

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and Tirole (1990)⁴⁴ and Bolton and Whinston (1991).⁴⁵ They have also been relevant to a number of major competition law and regulatory cases in recent years.

One notable example is the Pay TV Movies Inquiry, where Ofcom provisionally found that the existing market arrangements regarding the distribution of paid for movies were likely to have anticompetitive effects. Ofcom's primary concern was that Sky's strong position with regard to the acquisition (and subsequent distribution) of paid for movie content could adversely affect competition between Sky and rival pay-TV retailers, such as BT. However, the Competition Commission subsequently took the view that this was not the case, chiefly because the evidence it reviewed suggested that pay-TV movie content was not a significant enough driver of consumer's choice of pay-TV provider.⁴⁶

In considering whether there may be scope for anticompetitive effects arising from the vertical integration of voucher and nursery providers, we note the following:

- » The most plausible 'in principle' concern might be that an integrated supplier could choose to only accept its own vouchers through its nursery network, with the objective of increasing its market power in the provision of youchers.
- » However, the above would only tend to be commercially rational if: (i) the supplier had a strong position in the provision of childcare, such that parental choice was limited; and relatedly, (ii) that parent's desire to use that nursery was sufficient to motivate them to select or switch voucher providers. If this were not the case then, by refusing to accept vouchers from rival suppliers, the integrated firm may end up with reduced profits in its nursery business, as parents switch to alternative nurseries that do accept the rival's vouchers.
- Whilst it is not possible, within the scope of our work, to undertake a detailed review of the nature of competition for the supply of childcare, we note the following:
 - Firstly, we understand from HM Treasury that, with respect to the ESC voucher market, all major nursery providers currently accept vouchers from all suppliers. This would seem to sit at odds with the notion that integrated suppliers have an incentive to restrict competition.

In summary, therefore, we do not think that the vertically integrated nature of some existing suppliers raises any material concerns of relevance to the choice of market model in this case. However, Government could nonetheless consider risk mitigating steps, such as mandating the need for all suppliers of childcare to accept all vouchers.

4.8. The impact of consumer protection measures and regulatory safeguards

Under the new TFC voucher market, parents will be exposed to certain risks that would not have arisen under the ESC voucher market. For example, in the event of provider insolvency, parents would be regarded as unsecured creditors and so could be at risk of losing money.

Consequently, there are potential protection measures that could be used to mitigate these risks – such as:

- » Parent/Government funds being legally separate from voucher provider assets. For example, ensuring that funds were not legally classified as a company's asset.
- » Parent company guarantee. A number of voucher providers are part of larger Groups. These could be asked to effectively underwrite parent's funds in the event of insolvency.
- » Third party or bank guarantee/insurance. As per the above, but where the backing is insurance based.

Secondly, that in value terms the childcare market is likely to be far larger than the market for voucher provision (the financial information we have reviewed shows that integrated suppliers and/or group firms have significantly larger balance sheets and revenues than firms solely engaged in the supply of vouchers). In totality therefore, the potential 'gain' from seeking to leverage any market power with respect to childcare into the market for vouchering is likely to be modest. Once set against the risk that (as per the first issue described above) such a strategy may reduce profits from the nursery business, the incentive for such behaviour is likely to be low.

^{44 &#}x27;Vertical Integration and Market Foreclosure.' MIT CEPR, Hart and Tirole (1990).

^{45 &#}x27;The Foreclosure Effects of Vertical Mergers.' Journal of Institutional and Theoretical Economic, Bolton and Whinston (1991).

^{&#}x27;A report on the supply and acquisition of subscription pay-TV movie rights and services.' Competition Commission (2012).

- » Government guarantee. For example, as per the existing Government-backed Financial Services Compensation Scheme.
- » Code of conduct (either voluntary or not). Where the code requires companies not to treat parent funds as if they are their own capital.

From a supply side perspective, the key issue is whether any such protection (or other regulatory) requirements might drive excessive costs that limit the scope for entry and expansion.

Here our main observation is that the extent of the risk in question appears to be relatively limited. This is because, in the main, parents' funds will not sit in voucher accounts for long periods of time; but, rather, will be paid in, processed, and paid out to childcare providers within a relative short payment cycle. As a result, the total financial exposure must be limited. As a consequence of this, the appropriate 'scale' of any protection tool should itself also be moderated. The implication, in our view, is that the associated costs of any protection on voucher providers should not be material (i.e. so long as the policy tool is proportionate to the problem).

4.9. Conclusions and recommendations

With regards to our supply-side analysis, our key findings are as follows:

- » Firstly, we suggest that the TFC voucher market is likely to be characterised by low barriers to entry and expansion – and in particular, little capital investment is likely to be needed in order to enter the market.
- » Secondly, the additional capital investment associated with marketing and brand is: (i) unlikely to be sufficiently material to, in of itself, create a barrier to entry; or (ii) to lead to there being a clear and distinct B2C segment, which is less well provided for. That is not to say, however, that we might not see different entry models, with some suppliers primarily targeting B2B, some targeting B2C, and others targeting a mix of both.
- » Existing suppliers of ESC vouchers are likely to be particularly well placed and would only need to incur modest incremental capex in order to enter the market.
- » Given the low investment requirements, access to capital is not a particularly critical issue when considering entry scope. Nonetheless, we find that access to finance is unlikely to be a major impediment for around half of existing ESC suppliers.

- » There is limited direct evidence that can be used to robustly assess scale economies in the TFC market. Nonetheless, what evidence that does exist is generally not consistent with there being significant fixed costs.
- » Finally, there are some 'in principle' reasons to believe that 'partnering' and green field entry could also occur, with firms not currently in the ESC market choosing to enter the TFC market. In particular, such forms of entry may be attractive in the context of some firms choosing to target B2C. However, we think the likely scope for this may be somewhat limited.

Notwithstanding the above, there are a number of risks associated with the open market model. In particular:

- » The risk that Government drives unexpectedly high investment costs, where the primary risk is on the IT side, associated with how voucher providers' systems will interface with HMRC.
- » The risk that there could be 'time and resource' costs that existing voucher suppliers would incur in rearranging their businesses to migrate to the new market.
- » The risk that scale economies will be more significant than is the case in the current ESC market, and so % fee rates for voucher providers may be too low to attract sufficient entry to secure effective competition (although we consider this to be low risk).
- » The risk that the vertically integrated nature of certain providers could act to 'stunt' competition to the detriment of consumers (we also consider this to be low risk).

We do not consider any of the above risks to be so significant that they preclude the open market model. However, we think that for the open market model to work well, Government should be mindful of these issues and should consider the following mitigating steps:

- In designing the IT infrastructure and platform to support eligibility verification, Government should work closely with existing suppliers to ensure that it does not inadvertently drive substantial investment costs.
- Government should take steps to mitigate any market transition costs for existing suppliers and provide certainty as early as possible in the policy design process to help support commercial decision making.

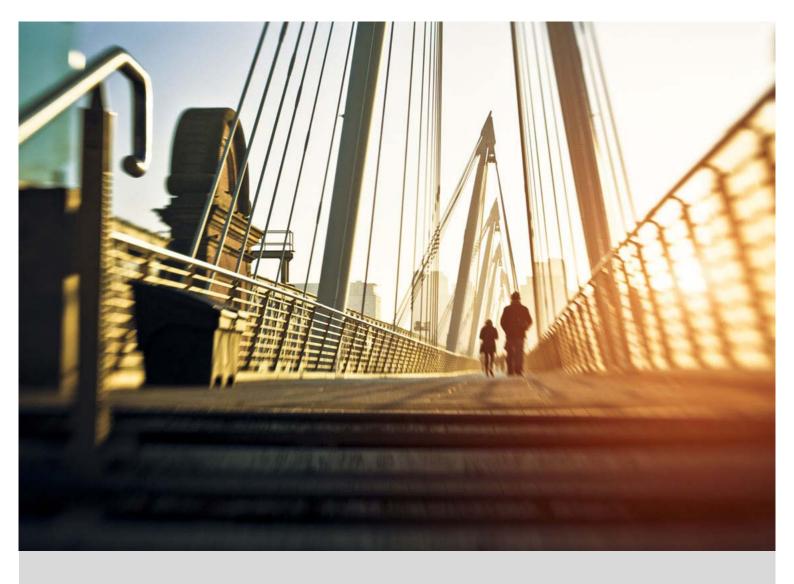
We consider scale economies and vertical integration related risks to be sufficiently low that they do not merit mitigating steps. However, were Government nonetheless concerned regarding these issues, it could consider:

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- Regarding scale economies: it could either err on the 'high' side with respect to % fee rates to voucher providers, or consider 'twopart tariff' type pricing structures to aid in fixed cost recovery.
- Regarding vertical integration issues: this could be mitigated by mandating the common acceptance of all vouchers, say through a 'Government approval' scheme.

In summary, from a supply side perspective, we believe that the evidence and analysis we have reviewed and undertaken is consistent with the open market model being the most appropriate option. However, the identified risks should be considered further and it may be necessary to implement some of the mitigation actions outlined



5. Findings and recommendations

This final section of our report provides an 'at-a-glance' summary of our main findings and recommendations.

Our key findings and recommendations are:

- (i) An open market model offers a number of advantages over a closed market model, and it should be chosen by Government unless there is reason to believe that the demand-side or supply-side of such a market would not work well.
- (ii) There are good reasons to believe that *the* demand-side and supply-side of an open market would work well.
- (iii) However, there are some risks and uncertainties associated with the new arrangements, which Government can and should address with the assistance of stakeholders.

5.1. Our key findings

Our main findings are as follows.

- » Provided that competition will function effectively within it, an open market model for TFC vouchers offers a number of advantages over a closed market model.
- » Based on the analysis set out in this report, there are good reasons to believe that the demand-side and the supply-side of the market will work well within an open market context.
- » On the demand-side, the evidence suggests that:
 - There are numerous triggers that will encourage employers and parents to access the information they need to choose a provider.
 - In addition, our discussions with providers and evidence from other markets suggests that meaningful service differentiation will emerge between providers, and so provide incentives for employers and parents to shop around.
 - Third party interest in the existing and new childcare voucher scheme will lead to the emergence of information that will help all parents (including those who are selfemployed) choose a provider that best meets their needs.
 - There will be costs associated with switching, but they are likely to be smaller than in other markets that have attracted the gaze of competition authorities, and the competitive effects of them is moderated by the relatively high proportion of new-tomarket customers entering each year.
- >> On the supply-side, the evidence suggests that:
 - There are low barriers to entry and expansion in that, whilst entrants would need to invest in IT and marketing, the scale of these 'sunk' costs is low.
 - The additional capital investment associated with marketing and brand is: (i) unlikely to be sufficiently material to, in of itself, create a barrier to entry; or (ii) to lead to there being a clear and distinct B2C segment, which is less well provided for. That is not to say, however, that we might not see different entry models, with some suppliers primarily targeting B2B, some targeting B2C and others targeting a mix of both.
 - There are no reasons to suppose that entrants could not access the finance required to support entry.
 - There is no evidence of there being material economies of scale associated with voucher provision.
 - There are a large number of existing voucher suppliers already serving the ESC voucher market that possess many of the

- skills and capabilities to compete effectively in the TFC voucher market.
- Incremental investment requirements for such providers are likely to be low and so they are particularly well placed to compete.
- Consistent with the above, all of the existing suppliers we spoke to said that they had a strong appetite to compete and, although the change in focus from B2B to B2C would present new challenges, they also saw new opportunities too.
- A range of entry models exist, and both green field and 'partnering' models of entry are, in principle, viable. In particular, such forms of entry may be attractive in the context of some firms choosing to target B2C. However, we think the likely scope for this may be limited.
- » However, we have also identified a number of risks and uncertainties in relation to factors that could have a bearing on the intensity of competition in an open market.
- >> On the demand-side they are:
 - It is unclear how much interest parents will take in their childcare voucher accounts and, if this is limited, their willingness to shop around for the best account may be limited too.
 - The current switching process leaves open the risk that parents could lose some of their top-ups if they switch to another provider.
 Although this risk is small, evidence from other markets suggests that such a perception could have a disproportionate effect on competition.
 - It is unclear how easy or difficult it will be for employers to switch voucher providers.
- » On the supply side the main concern is that the incremental capital requirements will be higher than anticipated due to Government decisions about how voucher providers' systems will interface with HMRC. A second key risk relates to the overall 'time and resource' costs that existing providers might face in transitioning to the new market.

5.2. Our recommendations

- » We recommend that Government should choose an open market model over a closed market model, unless new information emerges to suggest that we have underestimated the demand-side or supplyside impediments to competition.
- We recommend that Government should actively consider giving the additional funds to parents rather than providers on the basis that this could increase parents' interest in voucher accounts and in doing so increase competition.

- » We recommend that Government should, in collaboration with employers, parents, existing and potential new suppliers, explore the opportunities for addressing the risks and uncertainties identified above.
- » To address the demand-side issues, we think that the following opportunities should be considered.
 - Whether the registration and reregistration process could be used to capture useful information for new-to-market parents, such as a simple 'rate your provider out of five' score that could then be disseminated.
 - Redesigning the account transfer process in a way that eliminates the risk of parents losing some of their top-ups.
 - Sending parents currently enrolled on an ESC scheme a 'wake-up letter' to alert them to their right to choose a different voucher provider to the one that their employer has chosen or will choose.
 - Introducing an industry 'switching code of conduct' (which may be voluntary), which sets out the roles and responsibilities of

- parents, employers, the incoming and outgoing suppliers, in relation to the switching process.
- » To address the supply-side issues, we think that Government should work closely with existing suppliers to ensure that it does not inadvertently drive substantial investment costs. In doing so, Government should take care to ensure that costs are reduced, rather than transferred to parents or employers in a way that could increase the costs of switching. In addition, Government should take steps to minimise general transition costs for existing voucher suppliers and in particular ensure that there is sufficient certainty regarding key processes relating to TFC voucher provision to enable commercial and investment decisions to be made in good time.

Finally, the table on the following page shows our evaluation of the open and closed market models taking account of all the evidence reviewed in this report – addressing in turn each of the 'in principle' benefits and costs described previously.

Table 6 Final evaluation of open and closed market models.

Key issue	Open market model	Closed market model	Summary assessment
Scope to deliver dynamic efficiencies and innovation, to the benefit of parents and taxpayers			Supply and demand-side characteristics suggest that an open market will work effectively. Clear potential for cost savings and innovation to emerge and, importantly, to be shared with parents in an open market. Assessment points to the open market model.
Avoids regulatory failure risks	\odot	(3)	Combination of uncertainty over consumer needs, scope for product differentiation and innovation suggests that there is a risk of regulatory failure. Managing the balance between encouraging suppliers to be efficient and innovative and passing these benefits on to consumers will be challenging in the presence of dynamic efficiencies and innovation. Assessment points to the open market model.
Avoids costs and risks associated with Government managed procurement			Materiality of the costs and risks are unknown at present. Assessment ambiguous.
Potential to deliver most efficient route of supply where scope for product differentiation is limited	\odot		Evidence of existing product differentiation and good reasons to think that production differentiation will be important in future as providers become more consumer facing. Assessment points to the open market model.
Potential to deliver most efficient route of supply where economies of scale are material		②	No evidence of material economies of scale that would limit competition in an open market. Large number of existing suppliers, many of which are small, combined with relatively low incremental investment. Assessment points to the open market model.
Avoids duplication of sunk costs and stranded asset risk			No evidence of material sunk costs that would limit competition in an open market. Potential risk that a closed market model 'strands' existing assets if they would not have otherwise exited. Assessment points to the open market model.

Annex A – Existing suppliers

Table 7: Existing suppliers of ESC vouchers

Voucher provider	Immediate parent	Ultimate controlling party	Voucher provider	Immediate parent	Ultimate controlling party
Allsave	Motivcom plc	Motivcom plc	Ladybird Employee Benefits		Director controlled
Apple Childcare Vouchers		Director controlled	Mid Counties Co- operative (Co- operative Flexible Benefits)		Owned by members who elect board of directors
Asperity	International Benefits Holdings Limited	Inflexion Private Equity	My Family Care Vouchers	Motivcom PLC	Motivcom PLC
Busy Bees Benefits	Busy Bees Holdings Limited	Knowledge Universe Education	NW Brown and Company	NW Brown Group Limited	NW Brown Group Limited
Care 4 Kids (Vouchers 4 Kids)		Director controlled	Personal Group Benefits	Personal Group Holdings Plc	Personal Group Holdings Plc
Childcare Vouchers Limited (Edenred)	Edenred (UK Group) Limited	Edenred SA	Plain Solutions (Abacus Vouchers)		Director controlled
Computershare Voucher Services	Pathbold Limited	Computershare Limited	P&MM Employee Benefits	Motivcom PLC	Motivcom PLC
Daisies Vouchers	Hazlems FS Limited	Paradigm Partners LLP	Rascals Vouchers		Director controlled
Employers for Childcare Vouchers	Employers for Childcare Charitable Group	Director controlled	Sodexo Motivation Solutions	Sodexo Pass International	Sodexo SA
Enjoy Benefits (Early Years Vouchers)		Director controlled	Team Rewards		Director controlled
Fair Care		Director controlled	TEDS Management		Director controlled
Fideliti		Director controlled	Voucher Systems (Voucher Solutions; Childcare Voucher Solutions)		Director controlled
Gemelli Solutions		Director controlled	Wider Plan (Kiddivouchers)		Director controlled
Grass Roots Group (Care-4)	Grass Roots Group PLC	Grass Roots Group PLC	Youatwork	Youatwork Holdings	Youatwork Holdings
Kidsunlimited	Kidsunlimited Group Limited	Bright Horizons Family Solutions	Ladybird Employee Benefits		Director controlled

Source: HM Treasury

Annex B - Overview of demand-side problems and remedies in other markets

MARKET	STATUS	DEMAND-SIDE DIFFICULTIES IDENTIFIED
Store Cards	Competition Commission Final Report published March 2006	 Cardholders take out store cards to obtain the retail benefits they offer rather than the credit available to them. Customers do not exert pressure on store card APRs or late payment fees because their sensitivity to them is low. Customers do not exert pressure on insurance premiums purchased with store cards because their sensitivity to them is low and they have a poor understanding of the terms of the cover they are purchasing. Providers do not include sufficient information on their store card statements, leading to a lack of transparency in the provision of store credit card and card-related insurance. Remedies Where APRs are 25 per cent or above, warn cardholders on monthly statements that cheaper credit may be available elsewhere Give more and better information on all monthly statements Offer option to pay by direct debit Offer payment protection insurance separately from other elements of store cards
Bulk Liquefied Petroleum Gas for domestic customers	Competition Commission Final Report published June 2006	 The widespread practice, when a customer switches supplier, of the outgoing supplier removing its tank from the site and of the incoming supplier replacing it with an essentially similar tank, with the consequential costs of removing and installing tanks The lack of information among customers in that: some customers are not aware of their ability to switch supplier or of alternative suppliers; suppliers often do not provide sufficient information in advance about customers' liability for switching charges; and uncertainty about the likely level of inconvenience of the switching process, which contributes to customer perception of inconvenience

- The imposition of contractual restrictions on switching, including the use of lengthy fixed minimum terms in introductory contracts; requiring contract renewal as a condition of selective discounts; three month notice periods for terminations; and lack of clarity as to the extent of contractual liability.
- The lack of information among customers in that: customers are generally not aware of prices on offer from alternative suppliers and face some search costs in finding the cheapest suppliers; and customers cannot accurately assess which supplier will be most competitive over the 'whole life' of the supply arrangement.
- The practice among most suppliers of offering selective discounts to customers...they reduce the potential rewards to competitors for attempting to win customers away from current suppliers and thereby create a disincentive for firms to compete to win customers from one another.

Remedies

- Facilitation of tank transfer
- Standardizing, and improving information on, the switching process: outgoing supplier obliged to confirm contractual status of switching customer within seven days; suppliers to effect switches within 42 days; switching charges levied by the outgoing supplier capped at zero; provision of information on how to switch in contracts, on suppliers' websites and on the basis of a telephone call; and sending of a 'wake-up letter' to customers at the end of the transition period on the expiry of any exclusivity period.
- Changing customer contracts: notice periods of no more than 42 days; exclusivity periods of no more than two
 years; and waiving on remaining notice period where a switch is ready for completion before notice period has
 expired.
- Better provision of information on suppliers and their offers: suppliers to ensure that their trade associations
 provide on their websites...the areas they serve and their contacts details; further information on the LPG
 industry can be obtained on these websites; suppliers to provide customers with quotes (subject to the site
 visit); suppliers to provide on invoices the amount of LPG delivered in litres and the price paid in ppl; and
 suppliers to provide wake-up letters informing customers that they will be, or are, free to switch supplier...

Home Credit

Competition Commission Final Report published November 2006

Problems

- Customers placing greater value on other product attributes and from the difficulties customers have in assessing and comparing the prices of home credit loans.
- Where customers are insensitive to price and competing for new customers increases the risk of default, there is only a limited incentive to compete on price.

Remedies

- Require lenders to share data on customers' payment records (to overcome the information disadvantages faced by lenders attempting to compete to customers' business).
- Require lenders to publish prices on a website where customers can compare the prices of loans on offer.
- Ensure that the statements lenders will be required to provide under the new Consumer Credit Act contain information relevant to home credit customers.
- Ensure that those customers who repay loans early (around a third of all customers) get a fair rebate.

Northern Ireland	Competition	Problems
Personal Banking Customers	Commission Final Report published May 2007	 Inherent complexity in PCA charging structures that arose in part because PCAs service a wide variety of needs. Customers are not provided with the necessary information to enable them to have a sufficient understanding of the charges and interest rates that might apply to their PCA. A lack of responsiveness to changes in charges or interest rates in the market. A customer's decision to switch was more often prompted by dissatisfaction with their bank than the recognition of a better offer elsewhere. Anticipation of hassle and delay, as well as risks and costs of switching, created barriers to switching. Consumer indifferences, lack of interest in PCAs and ignorance of some charges were important reasons for the lack of switching. Remedies
		 Describe their PCA services in plain English Provide clear explanation on the levels of charges and interest rates and how and when they are applied Provide more information on bank statements including details of charges and interest rates. Provide every customers with an annual summary of the charges they have incurred and of interest paid and received. Give customers at least 14 days' notice from the date of their statement before charges and debit interest incurred are deducted from their account. Remind customers annually of their right to close their account of switch to another bank. Introduce improvements to the switching process, including offering a charge-free and interest-free overdraft facility to new customers for at least three months. Alternatively, banks must guarantee to refund any costs incurred from failures in the switching process regardless of whether the charges and interest were incurred as a result of an error by the new bank.
Personal Payment Protection Insurance	Competition Commission Final Report published October 2010	 Many consumers unaware that they can buy PPI from other providers, rarely shop around to compare prices and terms and conditions of PPI policies. The resulting 'point-of-sale' advantage makes it difficult for other PPI providers to reach credit providers' customers and in the absence of such competitive pressure, consumers are charged high prices. Remedies Prohibition on the supply of PPI at the point-of-sale. Prohibition on single-premium policies. A requirement to supply PPI quotes. Annual reviews and other measures to make sure that improved information is available to consumers to make it easier for them to compare and search for products and switch policies at a later point.
Private Motor Insurance	Competition Commission	Potential problems identified in Statement of Issues

investigation on-going

	- Statement of Issues released in September 2012	 The degree of product differentiation in PMI policies means that consumers need to shop around to compare the different levels of cover includedthe degree of product differentiation in PMI policies may lead to harm for some consumersi.e. high search costs, or indirect search costs are such that they prematurely stop consumers searching and consumers buy sub-optimal policies. Drip-in pricing [consumers only see part of the full price when they start to shop and price increments are dripped in through the sales process] for optional add-on services may be detrimental for customers if they subconsciously assume that they already see themselves in the position of the owner, when they are still in the purchase process. Transparency and complexity of add-on products. Obstacles to customers switching PMI providers – automatic renewal; charging a cancellation fee; protected noclaims discounts.
Private Healthcare	Competition Commission investigation on-going - Statement of Issues released in June 2012	Defential problems identified in Statement of Issues Limited accessible, standardized and comparable information (on price and quality) appears to be available that could assist either patients on their GPs (and possibly insurers) to select the most suitable consultant and/or hospital.
Personal Current Accounts	OFT Review published in January 2013 (follow-up to 2008 market study and other subsequent studies)	 Many customers are not familiar with the key prices associated with their current account and are therefore poorly placed to assess whether they are getting value for money, the potential gains from switching account, or how to manage their money better. We found that it is complex for consumers to assess both the likelihood of entering an unarranged overdraft and the charges for doing so. A combination of complexity and a lack of transparency means that consumers and competition are focused almost exclusively on more visible fees, and not on the less visible elements such as insufficient funds charges and forgone interest. The complexity and lack of transparency on many of the key fee elements of an account means that the visible benefits for switching for most consumers are relatively small, even though for some the actual benefits can be substantial. Consumers tend not to keep an eye on the market. The main motivators of switching are 'push' factors, when consumers feel that their currentbank has let them down in some way, or something has gone wrong rather than 'price' factors, when a better offer is seen to be available. When consumers do decide to compare accounts, the lack of transparency of the cost of the current account, in particular in relation to interest forgone and the application of charges, make such comparisons inherently difficult. Quality of service is also not easily observed before selecting a bank. Consumers tend to rely on information from bank branch staff and recommendations from family and friends.

Concerns about the switching process going wrong, and the time and effort required to switch act as a further barrier to consumers actually switching. There are particular concerns about missed payments and having to rectify any problems.

Initiatives under way

- 7 day switching initiative
- Steps to reduce problems that arise from transferring Direct Debits. Measures to reduce the impact on customers of any problems with transferring Direct Debits. A new consumer guide and website on switching between PCAs.
- Introduce an annual summary of the cost of their account for each customer
- Make charges more prominent on monthly statements, so that customers are more aware of the charges that
- Provide average credit and debit balances, which will help customers to estimate the potential benefits of switching PCA provider.
- Produce illustrative scenarios showing unarranged overdraft charges (UOCs), giving customers an idea of the costs for different patterns of use.
- Various initiatives specifically relating to unarranged overdraft charges.

Payday Lending Competition Potential problems identified in Statement of Issues Commission Impediments to customers' ability to search and identify the best value product, and switch supplier: accessing investigation on-going information; identifying best value offers (initial observations suggest that differences between lenders in the - Statement of Issues presentation of those products may mean it is not straightforward to compare products between lenders, even released in June 2013 when the necessary information is available); switching suppliers.

SME Banking	2013 OFT investigation on-going – Update Paper published September 2013	 Potential problems identified in Update Paper Historical concerns that relatively low levels of switching indicate that competition in SME banking is less effective than it should be. Historical concerns that limited transparency in the prices and offers of providers of SME banking services means that customers are not well placed to use their purchasing decisions to drive competition between providers.
Energy Retail Market	Ofgem Energy Supply Probe published in October 2008, Final Domestic Proposals published in March 2013	 Problems identified in the Energy Supply Probe Some customers find it difficult or time consuming to assess competing offers. Some are not confident that they can make a sound choice. Some are sceptical about the scale of potential benefits and whether they will be sustained. Some still worry about the administrative or billing errors, serving problems or moving inadvertently to a worse deal. Some are unable to get the best deals because they do not have internet access, a current bank account or both. Remedies

- Limiting the number of tariff choices a consumer would face. Standardising tariff structures. Creating rules designed to simplify bundles, discounts and reward points. Proposals to facilitate collective switching. Providing consumers with transparency on white label suppliers.
- Introducing a maximum limit on the number of core tariffs that suppliers will be able to offer at any point in time. Simplifying tariff structures to ensure that all tariffs have a simple standing charge (which could be zero) and unit rate structure (no multi-tier tariffs). Simplifying how discounts, bundles and reward points are offered and presented. Improving existing and introducing new consumer protection safeguards for both evergreen and fixed term offers. Migrating customers from tariffs that are closed to new customers ("dead tariffs") onto open tariffs, where this would be beneficial to the customer. Facilitating collective switching schemes that meet consumer interests and the aims of the RMR and allowing "white labels" time to absorb and adapt to our proposals.

Annex C - Key risks and mitigants

Category	Potential risk under an open market model	Potential solution	
Demand-side	Parents find it hard to compare the more subtle aspects of voucher services, which could act as a deterrent to shopping around.	The registration and eligibility verification processes could be used to capture useful information for new-to-market parents, such as a simple 'rate your provider out of five' score that could then be disseminated.	
Demand-side	Parents already associated with a voucher provider via ESC do not actively 'shop around' and instead 'roll-over' their existing arrangements.	Redesign of the account transfer process in a way that eliminates the risk of parents losing some of their top-ups.	
Demand-side	Parents will lose unspent top-ups from previous entitlement periods if they wish to transfer funds and/or the time cost associated with mitigating this risk, which could act as a deterrent to shopping around.	Sending parents currently enrolled on an ESC scheme a 'wake-up letter' to alert them to their right to choose a different voucher provider to the one that their employer has chosen or will choose.	
Demand-side	Uncertainties associated with the process and responsibilities in the situation where employers switch in order to offer their employees a different voucher provider.	Introducing an industry 'switching code of conduct' (which may be voluntary), which sets out the roles and responsibilities of parents, employers, the incoming and outgoing suppliers, in relation to the switching process.	
Supply-side	Incremental capital requirements will be higher than anticipated due to Government decisions about how voucher providers' systems will interface with HMRC.	Government should work closely with existing suppliers to ensure that it does not inadvertently drive substantial investment costs. In doing so, Government should take care to ensure that costs are reduced, rather than transferred to parents or employers in a way that could increase the costs of switching.	
Supply-side	High overall 'time and resource' costs that existing providers might face in transitioning to the new market.	As above.	

Further information

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