Section 7 and Schedule 1: temporary increase in annual investment allowance

By

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Section 7 of the Finance Act 2013 (FA 2013) temporarily raises the level of the annual investment allowance (AIA) ten-fold, from £25,000 to £250,000 for expenditure incurred during the calendar years 2013 and 2014. It is then proposed that the allowance will revert to its £25,000 level.\(^1\) This is the third change in the level of the allowance which was introduced in Budget 2008 at £50,000.\(^2\) It remained at that level until it was doubled to £100,000 for expenditure incurred after March 31, 2010 (or April 5 for unincorporated businesses), the announcement being made by the Right Honourable Alistair Darling in his final budget of the Labour Government on March 24, 2010.\(^3\) Just three months later, the Right Honourable George Osborne, in his inaugural budget for the Conservative-Liberal Democrat coalition, announced that from April 1, 2012 (or April 6, for non-corporates) the level of the AIA would be reduced to £25,000 per annum.\(^4\) In each case the changes, when implemented, came with transitional provisions to cater for taxpayers with chargeable periods which straddled the date of an increase or reduction.\(^5\) Detailed provisions also accompany the present temporary increase.

The provisions

Section 7 FA 2013 operates conventionally. As in the case of previous changes, the section simply substitutes by amendment a new figure for the maximum allowance, in what is now section 51A(5) of the Capital Allowances Act 2001 (CAA 2001). It is Schedule 1 to FA 2013 which causes the difficulty. This schedule makes provision where a taxpayer’s chargeable period extends across either the January 1, 2013 increase or the January 1, 2015 reduction. It introduces wholesale complexity, undesirable at any time but particularly so in a temporary measure. Ignoring accounting dates, the effect is most pronounced in the case of a business with a year-end falling between January 1, 2013 and February 28, 2013 and which has made AIA qualifying expenditure at various times throughout that year. The chargeable period of such a business will span both the April 2012 reduction of the allowance from £100,000 to £25,000, and also the January 1, 2013 increase to £250,000. This means that two sets of transitional provisions, those in section 11 of the Finance Act 2011 (FA 2011) and those in Schedule 1 to FA 2013, will each be engaged. Some 9.1 per cent of UK companies have a year-end during this window. Based on data extracted from the Financial Analysis Made Easy database this means that 170,465 companies are required potentially to perform the most detailed form of calculation under Schedule 1 to FA 2013, assuming their expenditure meets the requirements which would enable them to claim AIA.\(^6\) The writers had no data available for unincorporated businesses because, of course, only

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\(^{2}\) FA 2008 s.74 and Sch.24.


\(^{4}\) HC61, HM Treasury, *Budget 2010* (London: TSO, June 2010), 25, para.1.61; FA 2011 s.11.

\(^{5}\) Most pertinent to this article are FA 2011 s.11(5)–(12), for the transition downwards from £100,000 to £25,000.

\(^{6}\) Analysis of *FAME* (commercially available from Bureau van Dijk), 2007–2011. FAME (Financial Analysis Made Easy) provides financial information on all UK companies registered at Companies House. The information given includes detailed accounting and financial information and information concerning ownership structure such as
companies are required to file annual accounts in the UK and HMRC themselves publicly acknowledge the difficulty inherent in working from estimates as regards unincorporated businesses. Neither do the writers have any data about the size or nature of the individual businesses comprised in the result of their analysis which would enable them to gauge the capacity of these businesses to invest or to employ professional assistance at a proportionate cost. The scope for detailed and expensive compliance is, however, very clear. In order to illustrate the complexity that can arise under Schedule 1 to FA 2013 we shall examine the calculation as it falls to be done for a business with such a year-end.

Some definitions

It is necessary to begin an explanation of Schedule 1 to FA 2013 with two definitions which must then be adopted here. First, a taxpayer’s chargeable period which begins at any time before January 1, 2013 and ends on or after that date is termed by the legislation the “first straddling period”. Secondly, the date on which the April 2012 reduction in the allowance occurred for the taxpayer, either April 1, 2012 (corporation tax) or April 6, 2012 (income tax), is termed the “relevant date”. In the case postulated above, of a business with a year-end falling between January 1, and February 28, 2013, the “first straddling period” will divide into three parts. The first part will fall before the “relevant date”. The second part (essentially nine months) will lie between the “relevant date” and December 31, 2012 and the final part will be from January 1, 2013 to the year-end date of the business.

The calculation

One begins by determining the total maximum AIA for the whole “first straddling period”. This is relatively straightforward and achieved by calculating individually the maximum allowance available to the taxpayer in each of the three part periods of which the “first straddling period” is comprised (as noted above). The maximum allowance during each of those part periods is arrived at simply by carrying out a time apportionment by reference to the level of the allowance as stated in section 51A(5) CAA 2001. Once ascertained, the three maxima are added together to give an aggregate maximum. However where, as in the assumed case, the “first straddling period” begins before the “relevant date”, special rules go on to restrict the amount of allowance that can be claimed in respect of each part period. The taxpayer can then claim these allowances subject to the limit of the aggregate maximum. The restrictions serve two purposes. First, they are intended to ensure that the allowances which can be claimed in respect of expenditure before January 1, 2013 reflect those that would have been anticipated without the increase effected by section 7 and Schedule 1 to FA 2013. Secondly the restrictions preserve the principle of the
transitional provisions applied by FA 2011 on the decrease to £25,000. They do this by preventing allowance which was unused as at March 31, 2012 (corporation tax) or April 5, 2012 (income tax) being carried forward past the April 2012 transition.

1. Expenditure before the “relevant date”

In regard to the taxpayer’s qualifying AIA expenditure made during the “first straddling” period but before the “relevant date” the available allowance is calculated under section 51A CAA 2001 by the usual time apportionment but on the assumption that section 7 FA 2013 had not been enacted.\(^{12}\)

2. Expenditure between the “relevant date” and January 1, 2013

For expenditure made on or after the “relevant date” but before January 1, 2013, the calculation is a subtraction, “A” minus “B”, two designations which enjoy specific definitions. “A” is the maximum allowance to be calculated as if there was a separate chargeable period running from the “relevant date” to the end of the “first straddling period” but again ignoring the enactment of section 7 FA 2013. “B” is the amount (if any) by which qualifying expenditure made during the “first straddling period” but before the “relevant date” in respect of which AIA is claimed exceeds the maximum allowance that would have been available, assuming that the part of the “first straddling period” before the “relevant date” were a separate period.\(^{13}\)

3. Expenditure from January 1, 2013

Finally, in regard to expenditure made on or after January 1, 2013 the maximum allowance is the aggregate of the individual maximums assuming that the period between the “relevant date” and December 31, 2012 and the period from January 1, 2013 to the end of the “first straddling period” were themselves to be separate chargeable periods under section 51A CAA 2001.\(^{14}\) This means that to arrive at the available allowance for this final part of the “first straddling period” one deducts from the aggregate maximum of just those two part periods, the amount actually claimed up to December 31, 2012. The point of this exercise is to ensure that any unused allowance from the part period before the “relevant date” is lost so as to accord with the principle of the transitional provisions for the reduction to £25,000 in section 11(7) FA 2011.

The calculations are a little easier for businesses which have an accounting year that starts on or after the “relevant date” as only one transition will be straddled.\(^{15}\) Fortunately the Financial Analysis Made Easy (FAME) data suggests that 90.9 per cent of UK companies will be in this category.\(^{16}\) No attempt has been made to discuss the second straddling period, when the allowance reverts to £25,000, because Schedule 1 to FA 2013 follows the familiar method introduced in FA 2011 for the April 2012 reduction from £100,000 to £25,000.\(^{17}\)

\(^{12}\) FA 2013 Sch.1 para.2(2), Explanatory Notes, above fn.10, para.9.
\(^{13}\) FA 2013 Sch.1 para.2(4), Explanatory Notes, above fn.10, paras 11 and 12.
\(^{14}\) FA 2013 Sch.1 para.2(5), Explanatory Notes, above fn.10, para.13.
\(^{15}\) FA 2013 Sch.1 para.3, Explanatory Notes, above fn.10, paras 14 and 15.
\(^{16}\) Analysis of FAME (Bureau van Dijk) 2007–2011, above fn.6.
\(^{17}\) FA 2011 s.11(5)–(12); note however that s.11(11) is repealed by FA 2013 Sch.1 subpara.5(4) and (5).
by Schedule 1 to FA 2013 were noted by the critics when the Bill was in draft and reference should be made particularly to Silsby and to Chidell who each set out worked examples. 18 No amendments were sought to be introduced to the technical provisions of the draft legislation during its passage through Parliament. Indeed, in Public Bill committee MPs seemed largely oblivious to the problems of complexity, and such mention as was made of them barely scratched the surface of the convoluted capped apportionments that characterise Schedule 1 to FA 2013. 19

Availability

It will be readily appreciated that because of the time apportionment method used to calculate the available AIA, only businesses with a year-end of December 31 will have the potential to claim £250,000 in each of the two calendar years during which the maximum level will be available. Analysis of the FAME data suggests that in terms of UK companies, some 14.6 per cent file December 31 accounts. 20 All others will have the opportunity of only one full chargeable period enjoying a £250,000 maximum level AIA with apportioned elements as described in the first and second straddling periods.

Theory/policy

Previous notes in this Review have explained the effect of an accelerated depreciation allowance, and this aspect of theory does not need to be rehearsed again here. 21 It is important to note the advantages of AIA beyond promotion of investment. Compared to the standard writing-down capital allowance, AIA is simple and clean. The qualifying expenditure is the full cost of plant and machinery, so many small businesses can get a full tax relief on their business investment. There is no fuss about pooling. The writing-down capital allowances (WDA) specifies a main rate (currently 18 per cent) for expenditure on most items and a special rate (currently 8 per cent) for long-life assets, integral features, certain thermal insulation and some cars. By contrast, there is only one AIA rate of 100 per cent for qualifying expenditure. The fact that AIA benefits businesses that are actually investing suggests that as an investment incentive it is better than other alternatives such as a reduction in the statutory tax rate. The latter lowers the tax liability for all companies whether they are investing or not. Importantly, because it is available to businesses regardless of their organisational form, the AIA does not distort the incorporation decision of small businesses. By contrast, the starting company rate which was in place between 2002–03 and 2005–06 taxed the first £10,000 of profit at zero per cent but was only available to corporate profit. As recognised in Freedman and Crawford (2010) and Devereux and Liu (2013) 22, the zero starting rate represented a sizable tax incentive for small businesses to incorporate and induced behavioural responses that were unrelated to business investment.

20 Analysis of FAME, above fn.6.
There are, however, three theoretical objections to the AIA which have also been aired in the past but which, it should be noted, will be exaggerated by the temporary increase. First, the departure which the AIA constitutes from the standard of true economic depreciation, or indeed any recognised accounting practice whereby acquisition cost is systematically written down over the useful life of the asset. Secondly, at £250,000 it will be, for many businesses, effectively relief at 100 per cent per annum, such that the AIA exemplifies a tendency away from income as a tax base and towards the use of expenditure. The third point to notice is that, to the extent that the AIA can be claimed only for expenditure on plant and machinery, it favours businesses in capital-intensive industries and businesses with a flexible production technology which can substitute machinery and plant for other types of production inputs, including structure and labour, at little cost. According to the published HMRC statistics, capital allowance due from industry, plant, machinery and vehicle allowance accounts for 85.8 per cent of total capital allowances claimed across 13 broad industry sectors in the UK between 2006–07 and 2010–11. Distribution and Repairs, Banking, Finance and Insurance and Construction are the top three sectors claiming a disproportionately high capital allowance on plant and machinery. At the same time, capital allowances for plant and machinery in Extraction, Metal manufacturing, Chemicals and Energy and Water Supply are consistently below the economic average, suggesting that these industries are likely to benefit less from the AIA allowance increase. Perhaps more pertinently, however, it will be recalled that Andrew Harper’s initial verdict was “Whether this allowance marks progress is debatable, whether it will succeed is problematic” and with that in mind, particularly in view of the ten-fold increase, the aim of which is:

“… to encourage and incentivise business investment, in plant and machinery, particularly among SMEs”

it now seems appropriate to try and make some assessment of its impact as an incentive.

Pathfinding

Which businesses benefit from the increase?

In order to assess the effect of AIA allowances on investment the writers obtained some AIA statistics from HMRC by way of a request under the Freedom of Information Act 2000 (FOI). The writers summarise these statistics in Figure 1. Panel A shows the total number of AIA claims

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24 Harper, above fn.21, 485.
26 Harper, above fn.21, 486, in many copies mis-printed as “masks progress”.
27 HM Treasury, above fn.1, 44, para.1.134.
28 FOI 1920/13, July 4, 2013. At the time of writing the request and response were not available on the HMRC FOI disclosure log.
in each financial year as well as a breakdown by four AIA bands, taken at increments of £25,000, for each of the years between 2008–09 and 2011–12. Panel B shows total annual cost of AIA to the Exchequer as well as a breakdown of the cost by the chosen AIA bands during the same period.  

![Panel A: number of AIA claims](image1)

**Figure 1: AIA Statistics: 2008–09 to 2011–12**

It is clear from Panel A that since the AIA became established the total number of claims has remained remarkably constant despite the increase in the level of the allowance in 2010–11. Furthermore, the number of claims in the £0–£25,000 band is quite stable and remains around 90 per cent of the total. The number of claims in the bands above £25,000 sits at around 100,000 per year, but the number of claims in the £25,000–£50,000 band fell more than 40 per cent in response to the AIA increase in 2010–11. Specifically, around 50,000 businesses claimed AIA at exactly £50,000 in 2009–10, suggesting that the number of businesses benefiting from the April 2010 AIA increase is less than 5 per cent of the total business population in the UK. In addition, there are about 20,000 claims in the £50,000–£75,000 band in 2010–11 and 2011–12, while the number of claims in the £75,000–£100,000 band increased from 30,000 to 40,000 in

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Andrew Harper thanks Dr S.J. Gurman, Department of Physics, University of Leicester for suggesting this banding analysis to him.
2011–12. Around 30,000 businesses claimed AIA at the upper limit of £100,000, suggesting that even fewer businesses (around 3 per cent of total businesses in the UK) would benefit from the 2013 AIA increase.\footnote{FOI 1920/13, above fn.28, FOI 2248/13 August 20, 2013 at the time of writing also not available on the HMRC FOI disclosure log.}

More importantly, most businesses that benefited from the April 2010 AIA increase are large businesses and claimed the AIA as well as the regular WDA on qualifying investment expenditures above the AIA limit. Under these circumstances, the AIA increase will have two effects: first, a windfall subsidy to existing investment in respect of which WDA would otherwise have been claimed; and, secondly, a reduction in the user cost of capital for new investment by businesses with qualifying expenditure between £50,000 and £100,000 before 2010–11.

**The incentive effect via user cost of capital**

The neoclassical investment theory suggests that firms invest in order to adjust to their optimal level of capital, which in turn depends on optimal output and cost of capital.\footnote{The user cost of capital is the required rate of return by the firm to invest one more unit of capital. A firm should invest in capital until the value of the extra output that capital produces falls to equal the user cost. For an early reference on this topic, please see R.E. Hall and D.W. Jorgenson, “Tax policy and Investment Behaviour” (1967) 57(3) American Economic Review 391.} The AIA increase lowered the user cost of capital for some businesses, which in theory may encourage new investment. Specifically, since the AIA increase was capped at £100,000 in 2010–11 and 2011–12, it lowered the user cost of capital for those with investment between £50,000 and £100,000 before 2010–11. In other words, the user cost of capital for those investing below £50,000 or above £100,000 is unaffected by the 2010 AIA increase, and there is no incentive effect for these businesses to invest more.

The writers will now quantify the effect of AIA increase on the user cost of capital. In 2009–10, the regular WDA for plant and machinery was 20 per cent. Assuming an economic depreciation rate of 17.5 per cent, an inflation rate of 2.5 per cent and a real discount rate of 5 per cent, the user cost of capital for investing one more £1 on plant and machinery was around 0.07 if financed by retained earnings or equity, and 0.04 if financed by debt. As a result of the 2010 AIA increase, the user cost of capital for one more £1 investment between £50,000 and £100,000 decreased to 0.05, or by 28 per cent if financed by retained earnings or equity, and 0.029 or by 31 per cent if financed with debt. Given a long-run user cost elasticity of unity,\footnote{See, for example, Bond and Xing, Corporate taxation and capital accumulation (Oxford: OUCBT WP 10/15, 2010).} a rule-of-thumb calculation suggests that the step reduction of about 30 per cent in the user cost of capital resulting from the AIA increase is expected to increase investment for those investing between £50,000 and £100,000 by about 30 per cent.

For a hypothetical company investing £75,000 in 2009–10 that would qualify for AIA if the threshold had allowed, a 30 per cent increase in investment suggests that the investment will increase by £22,500 to a total of £97,500 in 2010–11. The total investment is still below the £100,000 threshold so that the additional investment can claim an additional AIA of £22,500, costing the Exchequer £4,725 if the company is taxed at the small rate and £6,300 if it is taxed at the main rate. Therefore, for every £1 additional AIA cost to the Exchequer the hypothetical
company will increase its investment by £3.60 to £4.80. For comparison, a hypothetical company investing £90,000 in 2009–10 that would qualify for AIA if the threshold had allowed will increase its investment by 30 per cent to £117,000, which exceeds the AIA threshold and can only claim the first £100,000 for AIA. In turn, the increase in the investment costs the Exchequer £2,100 at the small company rate and £2,800 at the main rate. It seems that the bang-for-the-buck effect is particularly large for those with qualifying investment between £76,923 and £100,000 before the AIA increase.

The added effect via additional cash flow

Note that the AIA increase will have added effects on investment spending for firms with financial constraints. Under the assumption that internal financing is less costly than external financing, firms with financial constraints will be able to invest more with cash saved from a reduced tax bill. Figure 2 below expresses the maximum amount of cash that can be saved from the AIA increase by companies taxed at the small company rate and at the main rate. The additional cash flow is calculated as the difference between the present value of WDA and AIA allowance rate multiplied by the qualifying investment amount. Assuming a real discount rate of 5 per cent and an inflation rate of 2.5 per cent, the present value of WDA for machinery and plant is 0.78 in 2009–10. As a result, there is limited additional cash flow arising for companies investing more than £50,000 before the AIA increase.

![Figure 2: Additional Cash from the AIA Increase (%)](image)

Expectations and behaviour

Beyond the neoclassical premise that investment can be expected to respond to changes in the user cost of capital, it is important to point out the manner in which the expectations of business persons influence the investment decision. The effect of expectation, as well as the user cost elasticity and the cash flow sensitivity may vary between firms of different sizes and in differing lines of business. Therefore, it does seem important to point out that both the increases and

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decreases in the level of the allowance were pre-announced months if not years in advance. Also the repeated changes in the level of the AIA that have occurred in just the five years since it was introduced may themselves constitute a psychological problem for some firms. Against such a background, as well as a willingness to respond, the ability and confidence to do so quickly become significant. Purely anecdotal evidence derived from conversations with businessmen suggests that they would far rather the allowance was fixed at a level of (say) £100,000 and left there. This is principally because businesses crave certainty to provide lead-in time and enable the planning of their affairs. The writers mention this not in any way as a proposal for reform but merely as an illustration of the reactions of business persons. The caveat with any fixed level of AIA, for example, at £100,000, is that it creates a discrete increase in the user cost of capital at the threshold. As a result, with the AIA fixed at that level we may expect a large number of firms to invest exactly at £100,000, which represents another type of behavioural response to the allowance.

**The Exchequer cost**

Finally, the writers comment on the likely cost of the January 2013 AIA increase. It can be seen from Figure 1, Panel B above that the cost of the AIA in 2011–12 at £100,000 was £2.2 billion. Figures updated in December 2012, and therefore taking account of both the April 2012 decrease to £25,000 and the announced increase to £250,000, show that in 2012–13 the cost is expected to fall to £1.5 billion.\(^{34}\) The Autumn statement estimates the additional cost element for the increase to £250,000 as follows\(^ {35}\):

**Table 1: AIA increase to £250,000: estimated Exchequer cost 2012–13 to 2015–16**

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It seems reasonable to anticipate a peak cost in 2014–15 at least in the region of £2.5 billion if not greater. As discussed above, the AIA increase to £100,000 benefited no more than 10 per cent of the businesses in the UK economy, although the effect of the AIA increase on new investment for this group of companies is likely to be sizable. By contrast, the cost of the AIA to the Exchequer almost doubled following the increase of the level from £50,000 to £100,000 (Figure 1, Panel B). Since the cost for AIA claims below £25,000 remains stable, the writers suspect that the major part of the increased cost of the AIA arises simply because raising the level of the AIA means that it becomes available in preference to WDA in respect of larger


\(^{35}\) HM Treasury, above fn.1, 56, Table 2.1 item 9.
tranches of otherwise routine investment. If this is correct, the increase will benefit only a narrow range of firms by providing them with a valuable windfall subsidy.

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