**Caledonian Trust PLC**

(The "Company" or the "Group")

**Audited Results for the year ended 30 June 2015**

Caledonian Trust PLC, the Edinburgh-based property investment holding and development company, announces its audited results for the year ended 30 June 2015.

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# CHAIRMAN'S STATEMENT

**Introduction**
The Group made a pre-tax profit of £565,000 in the year to 30 June 2015 compared with a profit of £164,000 last year. The profit per share was 4.79p and the NAV per share was 151.99p compared with a profit of 1.39p and a NAV of 147.19p last year.

Income from rent and service charges was £334,000 compared with £344,000 last year. There were no sales of investment properties in the year. Profit on the sale of development properties was £168,000 compared with £33,000 last year. Other operating income was £28,000 compared with £53,000 last year. Administrative expenses were £726,000 compared with £761,000 last year. Net interest payable was £115,000, an increase of £11,000 on last year, reflecting slightly higher borrowings. The weighted average base rate for the year was 0.5%.

**Review of Activities**
The Group continues its property investment business. In addition the management resources are almost wholly engaged in property development, including development necessary to secure consents, and on the provision of infrastructure for development plots. Due to the poor market conditions – in the year to September 2015 prices in Scotland fell 0.5% – and the prospect of a deterioration in these conditions contingent on the outcome of the referendum last autumn and with the general election in May 2015, we have continued to postpone all of our larger schemes. As is discussed later, market conditions and prospects have now considerably improved and we are about to expand our development activity and, in parallel, increase our marketing of house plots in those areas where market conditions appear more propitious. We continue to hold two small, high-yielding, retail parades and some small garage investments in central Edinburgh subsequent to realising the vast majority of our investment property before the 2007 peak apart from specific properties with development or other special attributes. In October 2015 we sold our garage in Gloucester Lane to an adjoining proprietor and realised a substantial premium to book value.

Our largest property is St Margaret's House, London Road, Edinburgh, a 92,000ft$^2$ 1970s multi-storey building on the A1 about one mile east of the Parliament and Princes Street. Due to poor market conditions redevelopment has been delayed and since November 2010 it has been let at a nominal rent to a charity, the Edinburgh Palette, who have reconfigured and sub-let all the space to over 250 "artists" and "artisans" and "galleries". Tenant turnover is only 1% and there is a "waiting list" of over 200 attracted to this high-quality space by the subsidised rent, the excellent management and the endemic empathetic ethos. One hundred and twenty of the 168 parking spaces are let to our immediate neighbours in Meadowbank House, the Registers of Scotland, on a short-term lease. The subsidised rent has allowed the tenant to effect substantial repairs and improvements, to build up reserves and to establish their innovative concept which is obtaining international recognition. Thus the current level of subsidy from the Group is not necessary for the charity's purposes, and, indeed, a transition, carefully modulated to ensure possible deleterious effects are mitigated, will allow the charity to develop into an organisation that can support its causes amongst a wider range of individuals as a result of its greater financial strength and lesser dependence. The scale of the present support is strictly evident from the rental accruing to the group from the average of the sublease of one, two and three 100 ft$^2$ window units of £5 per week each: in student terms less than two pints of beer!!

In view of the changed circumstances we are discussing a phased but large increase in rent with the Edinburgh Palette. To mitigate hardship we are discussing the provision of specific scholarships and bursaries so as not to impair the Edinburgh Palette's important charitable or cultural contribution. Other rental income at St Margaret's will also increase. We are negotiating a rent review of the 120 car parking spaces currently let at only £1.20 each per weekday. Significantly we have gained a consent for an advertising hoarding whose rental we are negotiating of up to £40,000. The market rental for St Margaret's is significantly in excess of £500,000 and together these measures will allow a progressive move towards that level from the current unrealistic level.

Improved rents will compensate for the very high costs previously incurred in holding the building and the long and expensive process of gaining and maintaining consent for development which started over ten years ago but only progressed significantly when in 2007 our architect produced a Development Brief for the triangle covering St Margaret's House, the adjacent 120,000ft$^2$ Meadowbank House, owned and occupied by the Registers of Scotland, and the various small properties lying between the A1 and "Smokey Brae". The Development Brief, after modification, was adopted by the Council in August 2009 as a Master Plan for that triangle, and provided the basis for our application in July 2009 for Planning Permission in Principle (PPP) for a 231,000ft$^2$ mixed-use development of residential and/or student accommodation, an hotel, offices and other commercial space together with parking for 225 cars for which consent was issued in September 2011. Unfortunately, the poor and constantly-changing market conditions since 2011 have precluded the design of specific proposals. Accordingly, we applied for a renewal of the PPP in May 2014 for which we had to update all the many

technical reports and undertake several new ones: all a lengthy and expensive process. The consent was renewed subject to a Section 75 Agreement in June 2015.

The redevelopment prospects for St Margaret's have improved very considerably and very rapidly and a fuller comment on the market is given in Property Prospects, but the relevant evidence for this change is straightforward. Site values for flats for sale, for flats for the Private Rented Sector and for student accommodation have risen rapidly because of an increased demand impinging on an inelastic supply. Site shortage in the city centre and a desire by the University to diversify their holdings from south of Princes Street have made areas north and east of Princes Street much more valuable. For St Margaret's the most striking change is the City of Edinburgh Council's proposal to redevelop the adjacent Meadowbank Stadium to provide a new smaller modern sports facility and a large residential development for over 1,000 students and 300,000ft² of housing The funding is nearly complete and the proposed development awaits approval next month. The City of Edinburgh Council perceives there is an acute shortage of a wide range of accommodation, particularly near the city centre.

We are evaluating several development options for St Margaret's. If part of the existing building were retained, a series of smaller developments, each of 40,000ft$^2$ to 60,000ft$^2$, could be built. Part of the site is ideal for private housing or for an hotel, occupying the higher westerly "tower" with views to the Castle, Arthur's Seat, the City and the Forth estuary. A part of the site has also been assessed for housing to rent at the "higher market rent level" –about 80% of open-market rents – with a medium-term option to sell at open-market prices. The potential for student housing has been considerably enhanced by the probable development of Meadowbank. Student accommodation is very appropriate, given the central location with excellent bus routes, the adjacent Meadowbank sports complex, easy access to the Park and daytime bus services from the door to Old College and the nearby George Square every twelve minutes and to Queen Margaret University and Heriot Watt every half-hour. Amongst many other possible office uses, the 231,000ft$^2$ consent would be eminently suitable for any centralisation of, or the transfer of, the various tax-raising powers to Holyrood, or for a large-scale relocation of "back offices" from London or the South East. Lastly, and very neatly, a discount store could occupy a street-level frontage, complementing existing local stores and catering conveniently for the greatly enlarged resident population. Suddenly, it all seems quite self-evident: certainly different from ten or even five years ago.

In 2007 we delayed the development of our three sites in or near Edinburgh because of worsening economic conditions. Last year I repeated once again my 2012 statement: "There is a tangible risk of a further fall in house prices. In these circumstances a large development of a block of flats or a number of houses requiring heavy infrastructure investment would result in an illiquid investment with very limited or nil profit margin: accordingly, we continue to delay any major investment ..." and only undertake "... small, low-investment, low-infrastructure projects". Last year's warning proved prescient as the average house price in Edinburgh to the year ended 30 September 2015 fell 0.5% and there were larger falls of 3.1% in Edinburgh, of 4.4% in East Lothian and of 0.8% in Perth and Kinross, important reference areas for many of our rural developments. Last year I also restated that: "We will not commission any major development until market conditions improve further or until the possibility of a final glitch in the economy is insignificant". This view has proved prudent, given our experience at Brunstane Home Farm where we had completed the extensive alterations to four listed Georgian, stone-built, two-bedroom cottages together with the infrastructure necessary for the subsequent larger development over two years ago. The end-terraced cottage sold this time two years ago for nearly £250,000, approximately £300/ft², a high price for the area. A mid-terraced house, with a lower valuation, sold last year for about 5% less. The two remaining cottages have been marketed since then and a mid-terraced house sold in September 2015 and the end terraced cottage, abutting the steading, is now under offer, a sale assisted by the completion of the extensive demolition immediately adjacent to it and by the partial reconstruction of that part of the stone-built steading.

In addition to these cottages we own open ground to the south of the cottages, a large listed Georgian steading and two adjacent acres of land, all part of Brunstane Home Farm, which is in the Green Belt in east Edinburgh, but is just off the A1, and lies immediately adjacent to Brunstane railway station with services on the newly-opened Borders Railway between Tweedbank and Edinburgh (seven minutes). On the open ground south of these cottages and parallel to them we secured consent last year to construct two new semi-detached houses which, together with a mature wood to the west, will complete a traditional farm courtyard. These two new houses, each 1245ft², will be entirely of new construction with the courtyard elevations faced with natural stone. Site clearance for these two houses has started and we expect completion in the summer of 2016. We have consent to convert the listed stone-built Georgian Brunstane steading, to reconstruct a cottage attached to it and to form ten individually-designed houses of various sizes comprising over 14,648ft² in total. These houses have been extensively redesigned, principally to provide contemporary-style large dining/living spaces, more en-suite bathrooms and better fenestration, together with lower construction costs. Work on the stonework for the next phase of five houses, the "Horse Mill", which comprises the five stone-arched cart sheds, a single-storey cottage, the main barn and an hexagonal Horse Mill, a notable feature, is well advanced. The extensive and uncertain nature of the stone replacements and repairs required, some of it highly "tooled", resulted in quotes of over £250,000 for this work alone. In order to reduce this cost, we have employed contract staff directly and will

effect all the necessary repairs – incidentally substantially greater than original estimates – for a fraction of the earlier quotations. The work has taken nearly two years but, given the recent grave market uncertainties, together with a possible market improvement, the delay will prove beneficial. Once the stonework is complete five new-built houses will be inserted in the reconstructed outer shell. The progress of the masonry work, which requires the use of traditional lime mortar unsuitable for use under 5° is very weather dependent. We hurry slowly, but the quality is exceptional. The masonry repairs of the Horse Mill phase will include the limited restoration of the west elevation of part of the next phase, the Stackyard, a further five houses. Apart from this west elevation, all the Stackyard construction will be new, allowing a similar high-quality product, but at a much lower construction cost and a marginal servicing cost. I expect the sales value of this steading refurbishment to exceed £4m. East of the main steading lies a detached stone building with consent for conversion and extension to a detached farmhouse extending to 3,226ft². The farmhouse site is on open ground with clear views to the Forth estuary to the north and to the Pentland Hills to the south. Around the farmhouse in open ground to the east we hold a further two-acre site, being abstracted from the Green Belt in the Finalised Draft Edinburgh Local Plan which we expect to be adopted next year. Proposals for the development of this two-acre site including the existing farmhouse site have been accepted in principle, suitable for a development of fifteen – twenty-five new-build houses.

At Wallyford, Musselburgh, we have implemented a consent for six detached houses and four semi-detached houses over 12,469ft². The site lies within 400m of the East Coast mainline station, is near the A1/A720 City Bypass junction and is contiguous with a recently-completed development of 250 houses. Taylor Wimpey are building over 400 houses nearby, but on the other side of the mainline railway, which are selling rapidly at prices that have risen modestly to the current £214/ft² for detached houses and £246/ft² for smaller terraced houses. The environment at Wallyford, formerly a mining village, but well located and on the fertile East Lothian coastal strip, continues to improve.

The third of our delayed sites is in Edinburgh at Belford Road, a quiet cul-de-sac less than 500m from Charlotte Square and the west end of Princes Street, where we have a long-standing office consent for 22,500ft² and fourteen cars and where, by starting construction, we have taken up that consent. We also hold a separate residential consent which has also been implemented for a development of twenty flats over 21,000ft² together with indoor parking for twenty cars on which work started last year, securing the development potential.

The present residential design does not maximise the development value of the site, as it requires extensive excavation of the bedrock and consequent support for the neighbouring structures. The marginal cost of such work increases much more rapidly than the marginal revenue and, once the easily-excavated areas are extended into the bedrock, the marginal costs progressively outweigh the marginal revenues. Moreover, this design cannot accommodate a variation of the floorplate to reduce excavation cost without a consequent reduction in marginal revenue greater than the marginal reduction in cost. The scheme has been redesigned to eliminate this design disadvantage, but the resulting building may not accord with the current interpretation of planning policy. We propose to undertake further site work to allow construction costs to be more accurately assessed and the risk of construction cost overruns reduced, facilitating lower tender prices. The lower costs we expect to achieve, combined with the possibility of higher values for the usable areas obtained, may allow the current design to be built profitably without a major alteration to the façade and street, but with small alterations within the current consent. The prospects for development are distinctly better than last year.

The Company has three large development sites in the Edinburgh and Glasgow catchments, of which two are at Cockburnspath, Scottish Borders, on the A1 just east of Dunbar on the East Lothian Border. We have implemented the planning consent on both the 45 house plot northerly Dunglass site and on the 24 house plot southerly Hazeldean site. Additionally, there are four affordable houses on the Hazeldean site. The Dunglass site extends to fifteen acres but over four acres is a woodland. There is an additional area within the fifteen acre site which is capable of holding up to thirty houses and it is being evaluated further, as the ground conditions, which initially appeared to preclude development, may be remediated. At Hazeldean several options are being considered to meet the requirements for the four affordable houses necessary to meet planning conditions.

These sites lie just on the Scottish Borders side of the boundary with East Lothian. In the year to September East Lothian prices fell 4.4% but rose 7.5% in the Scottish Borders, and detached houses, the category almost exclusively in our sites, fell 8.2% in East Lothian but rose 3.9% in the Scottish Borders. Whenever the market appears suitable we will undertake a trial development of a self-contained group of four houses within the Dunglass site.

The third large development site is only seven miles from central Glasgow at Gartshore, Kirkintilloch, (on the Union Canal), East Dunbartonshire, and comprises the nucleus of the large estate owned until recently by the Whitelaw family. It includes 120 acres of farmland, 80 acres of policies and tree-lined parks, a designed landscape with a magnificent Georgian *pigeonnier*, an ornate 15,000ft² Victorian stable block, three cottages and other buildings and a huge walled garden. Gartshore is near Glasgow, two miles from the M73/M80 junction, seven miles from the M8 (via the M73) and three miles from two Glasgow/Edinburgh mainline stations and from

Greenfaulds, a Glasgow commuter station. Gartshore's central location, its historic setting and its inherent amenity identify it as a natural site for development. To make the best use of these attributes, proposals have been prepared for a village of several hundred cottages and houses together with local amenities, all within the existing landscape setting. Such a development would complement our other proposals for a high-quality business park, including an hotel and a destination leisure centre all situated in mature parkland. Discussions with and representations to, East Dunbartonshire Council continue and we are seeking Council support for a joint promotion of the site. As part of that promotion a part of the stable block is being refurbished as an exhibition and visitor centre which will allow Gartshore to be promoted more widely.

The company owns fourteen separate rural development opportunities, nine in Perthshire, three in Fife and two in Argyll and Bute, all set in areas of high amenity. Such small developments are outwith major housing allocations and local authorities tend not to give them high priority. Being located in attractive areas, they are subject to objection to which local authority members, now elected by proportional representation, are increasingly sensitive, as their seats are less secure. Thus, gaining planning consent for such developments has become increasingly more difficult, requiring in some cases the scale of development to be restricted. Notwithstanding these difficulties, we continue to promote sites successfully through the planning process and to add new or improved consents to those we already hold.

In Perthshire, at Tomperran, a 30 acre site/smallholding in Comrie on the River Earn, we hold a consent for twelve detached houses totalling over 19,206ft². The demolition work required for these houses to secure the planning consent has been completed. West of this site and near the town we have submitted an application for a further thirteen houses on our adjoining two-acre area previously zoned for industrial use. This application continues to be considered under delegated powers. The total scheme of twenty-five new houses covering two areas will occupy over 40,000ft².

At Chance Inn farm steading we were granted a consent for ten new houses on 28 August 2015 over 21,836ft² following acceptance of our engineering proposals to effect the necessary phosphate reduction programme.

Nearby at Carnbo, on the A91 Kinross to Stirling road, the recent Local Plan included in the village settlement the paddock which we retained when we sold the former Carnbo farmhouse. Based on the changes to the Local Plan consent was issued on 29 July 2015 for the development of four houses over 7,900ft². Our first planning application here was registered by the planning authority on 26 June 2008, more than seven years ago! These plots are expected to be marketed in the spring 2016, subsequent to completion of the required archaeological survey.

At Strathtay we gained consents in 2011 for two large detached houses totalling over 6,040ft² and for a mansion house and two ancillary dwellings over 10,811ft² in a secluded garden and paddock near the River Tay. We have completed initial building works and have taken up both the consent for the two detached houses and, separately, for the mansion house. Prices for detached houses in Perthshire fell 2.5% in the year ended 30 September 2015 and, when the market improves, these plots will be marketed.

At Myreside Farm, in the Carse of Gowrie between Perth and Dundee, we have had five planning attempts and appeals since our first application on this site was made in 2007. Accepting further guidance from the planning department, we modified the proposals and, on 7 November 2014, gained approval for five new-build houses over 8,531ft², adjacent to the existing listed farmhouse which is let on a short-assured lease.

In Fife we have attractive rural sites near St Andrews. At Larennie, adjacent to the Michelin-starred Peat Inn, five miles from St Andrews, consent was gained in April 2011 to renovate and extend an existing stone-built cottage, to convert stone buildings to four houses and to build four new houses over 19,325ft², forming nine dwellings. Due to poor market conditions development has been delayed, but we have had the consent extended for three years until April 2017. At Frithfield, only six miles from St Andrews, a site with stunning views south to the Forth estuary, we continue to undertake work to meet the planning criteria including a changed access for a development of twelve houses over 20,236ft². The necessary access can be achieved over land in our control. Fife house prices rose 6.6% in the year to September 2015 and we expect all our Fife developments to benefit from the manifest and growing attraction of nearby St Andrews.

Ardpatrick is our largest rural development site, a peninsula of great natural beauty on West Loch Tarbert, but only two hours' drive from Glasgow and the Central Belt. The long-term prospects for residential property are excellent but their realisation requires considerable further investment and skill to rectify the continuing effect of severe prolonged neglect.

Fortunately, due to the high quality of design and construction of both the original Georgian and the later Victorian property much of the integrity of the estate remains intact, or recoverable wherever restoration is practicable. Progress has continued to be slowed by repairs to Ardpatrick's buildings, farm sheds and landscape after two exceptional storms in recent years. Previous wet winters have highlighted the deterioration of much of

the arterial and field drainage systems, and of the risk of enhanced water levels further damaging roads, accesses, walls and fields. Higher water tables flood the fields, cause alteration to the grass swards and result in structural damage on the passage of machinery. The recent very wet summer has both validated the repairs so far achieved and highlighted and hindered those still to be made. Frustratingly, unlike most other repairs, drain repairs are largely hidden and the benefits not readily appreciated.

At Ardpatrick the development framework was changed by the 2009 North Kintyre Landscape Capacity Study. Prior to that study a consent was gained at South Lodge to double the size of the dwelling and to add a large garage. Following restoration South Lodge was marketed for a long time before being under offer in the summer of 2014 and being sold in the autumn after the referendum for just under the £225,000 asking price. Before 2009 we also gained consent to change the use of "Keepers", a bothy situated among the Achadh-Chaorann group of cottages, and to extend that building to form a three-bedroom house, conditional on providing a new access and drive. This work has been constructed and consent has been granted for an enhanced design. This property is currently being marketed. Several other consents originally obtained or granted in 2009 have been renewed. The consent to sub-divide Ardpatrick House and to develop Oak Lodge, a two-storey 1,670ft² new build on the Shore Road, has been renewed.

Consents have also been renewed to convert the "Gardener's Bothy" into a 1300ft² single storey house, to convert the Garage complex into two flats, to extend the Laundry Cottage and to build a new 1600ft² single storey house within a corner of the walled garden.

There are a number of practicable development opportunities within the areas designated in the Landscape Capacity Study. In 2011 we secured consent for two one-and-a-half storey houses each of 2,200ft² at the north end of the estate on the B8024 Kilberry Road. Nearby on the west side of the UC33 Ardpatrick Road we hold outline consent for a detached house in a woodland setting and outline consent for a further two houses on the Dunmore schoolhouse field on the east side of the UC33, bordering the Cuildrynoch Burn.

Unfortunately other potential new sites and many of the existing conversion sites are commercially difficult to realise. Current market conditions continue to be unhelpful although prices have risen this year to recover last year's fall, but major continuing constraints are the high cost of conversion and the cost of upgrading the inadequate infrastructure, partially due to the required enhancement of the public infrastructural services. Additionally, the number of competing sites continues to rise. It is not difficult to envisage that second homes, holiday homes and relocation/retirement homes would be amongst the last to recover following a depression. However, when there is a sustained recovery, Ardpatrick's place is assured.

**Economic Prospects**

The UK economy grew at 0.6% in the three months to October 2015 and is expected to grow by 2.5% in 2015, approximately the UK's long-term growth rate. Output is now about 4.8% higher than in January 2014 when the economy emerged from a prolonged six-year depression, far longer than any previously documented, of which the Great Depression was a comparatively brief four years from 1930 – 1934. The expected 2015 growth rate is closely in line with forecasts made last year by the Economist's Poll of Forecasters, NIESR and HMT but below the Bank's 2.9% forecast. Their forecasts for 2016 are for 2.3% apart from the Bank whose central forecast is about 2.5%.

The stability implied by these expected growth rates is reassuring after the long depression but not a cause for celebration. After a deep depression and a long recession economies normally experience above average growth rates. For example, following the previous recession in 1990, a recession of only 3.0%, subsequent annual rises in GDP were 3.2%, 4.8% and 2.9%. Following the trough of the Great Depression in the US in 1933, the US economy grew at 9% for several years. Any "bounce" in the UK economy is not remarkable. The depression technically ended in Q1 2014 as GDP rose to the level prior to the 1998 recession but GDP per head only reached the pre-recession level in Q2 2015, fifteen months later, or a full seven years since the recession. If the economy had grown at a "normal" rate of 2.5% during the depression years then rather than just equalling the pre-recession level in Q2 2015 it would have been 18.87% larger (1.025). Thus all these years of potential growth and hence improved living standards have been lost, and, unless there is a "catch up", a vastly improved rate of growth following the depression, but now almost certainly unlikely, will never be regained.

Increases in real GDP per person depend crucially on increases in productivity or output per employed hour. In the decade prior to the 2008/2009 recession productivity was growing at its historical rate of around 2.3%. Had this trend continued whole economy labour productivity per hour in 2015 would have been about 18% higher than in Q1 2008, the start of the recent recession. However, following falls in 2008, 2009, 2012 and early 2014, labour productivity in Q2 2015 was just 0.4% above the pre-recession peak in Q2 2008, a feature described by the ONS as unprecedented in the post-war period. A year earlier in Q2 2014, six years after the pre-recession peak, labour productivity was 4% below the 1998 peak whereas six years after the 1961 and 1950 recessions it

was 19% above the peak, and following the 1973 and 1979 recessions it was approximately 12% above the pre-recession peak.

The cause of this anomaly, the "UK productivity puzzle" has been the subject of much research, comment and speculation. The collective view of the majority of economists is that productivity will soon return to "normal", a prediction that has been made repeatedly. The FT columnist, Chris Giles, compares this opinion with that of English World Cup football fans who, for almost half a century, have "exuded hope over experience", clutching at straws such as a new "golden generation" to gain the World Cup.
Two quite separate but common explanations are given for a return to previous productivity levels. The first, advocated by Lord King, former Bank of England Governor, was that, as there was no reason to believe the productive potential of the economy had changed, growth in output per unit labour would return to the pre-recession (1997-2007) level. Similarly, but more colourfully, Adam Posen, an MPC member, has argued that the level of potential productivity could not have fallen "because no-one woke up one morning to find their left arm had fallen off". He contested that one should not "reason backwards from a period of growth shortfall ...... that growth potential has fallen".

Contrary to these arguments of unvarying productivity growth, there are many examples of countries of varying growth, including the US, and the UK may be in such a phase or at least partly so. Many reasons are advanced for a variation from the frivolous to the temporary to the cyclical and to the secular and they all may be true, at least in part. Mensuration, and aggregating the total output is subject to error. Political correctness will have eliminated the classic joke of such difficulty from academic lectures on national income accounting: about the man that reduced national income by marrying the housekeeper, so an employment giving output was replaced by household production........! Fortunately, while many other examples of the difficulties of mensuration are readily available, they are not nearly so self-evident. Household production has also increased, rapidly in recent years, in less politically-incorrect areas. Personal electronic equipment performs effortlessly many previously menial tasks such as checking timetables, weather, taxi locations and checking in at airports so increasing at low cost the efficiency of household production for which currently national statistics take little account.

While computer technology has obvious advantages there are ever more convincing reports of some disadvantages offsetting and underreported as, for example, an academic study that Finnish public sector workers waste, on average, four hours per week troubleshooting computer problems – a productivity loss of 10%.

Corporate investment in computers from the early 1970s to the early 1990s, long before the depression, was immense but at the same time productivity declined, a decline continued recently despite the widespread introduction of even more sophisticated consumer-oriented technology such as smart phones. While no possible significant statistical correlation can be supported, apocryphal and anecdotal reports abound of disruption, high capital requirements of time investment, aborted systems and the transition of productivity gains from technology originator, say utility providers, to productivity losses of the users, the consumers. There are widespread horrifying failures in IT in banking, central and local government, defence and the NHS, spectacularly abandoning a programme in which £10bn had already been spent!

These failures are of "big systems". The cumulative costs at the other end of the spectrum, - the users of these systems brought into use – is more easily, and amusingly, illustrated. Lucy Kellaway, the FT columnist, one familiar with IT, describes returning to work after a vacation and completing her work tasks, such as writing her column before embarking on the menial duty of claiming her expenses, £92.29, for which she held a receipt. "I started the job at 3.30 pm and by 5.00 pm was close to tears. The times I had to interrupt other people for help. Everyone who sits around me was disturbed by shouts of "I hate [expletive] this [expletive] expenses system" ....."I could not get it to work in Chrome; it kept telling me to disable my pop-up blocker but, as I do not know what that is, I could not oblige. Then every time I tried to fill in its baffling boxes, it replied "invalid value ........" and so on. Then she writes, prior to submission, "You have to print out the report, photocopy all receipts then work out how to scan them all together and email them ....." Presumably the unified style of presentation of the expense claims will reduce their processing costs and, cynically perhaps, reduce the value of expenses claimed, but at considerable cost: hours "faffing around" as the author describes it, the opportunity cost of the time for several staff, the stresses and the reversal of "wellness" programmes designed to de-stress staff! Patently, while no general conclusion can be drawn from this particular (but amusing) rant, the investment of training for and the cost of inputting and manipulating data for computer insertion is a relevant consideration in evaluating the productivity benefits of such systems. Without analysis, it is self-evident that some will be spectacularly beneficial and some similarly unbeneficial. The gains of some are the losses of others, but determining these requires measurement, analysis, understanding of the whole system, so often lacking, and an acceptance of challenging accepted norms: as Maija Palmer, writing in the FT says of this sacred cow: "One of the reasons why an honest calculation of technology costs does not happen is fear".

If computers and technology have not brought about the scale of improvements in productivity which they may have been expected to achieve, a subtle argument has been advanced. To gain full advantage of their

capabilities not only do the machines and their capabilities have to be available, ie the hardware and the software, but the necessary changes in behaviour and routine have to be engaged by their users. A big change in routine is required to access their very considerable but only potential advantages. At this point there is a grave psychological problem, apparently an innate one affecting behaviour. John Kay observes from his university teaching that, while the simple clerical administration and communication within the university has changed, the delivery of the university teaching programmes, all capable of modification, is hardly changed: the new toys affect the mechanics of the system but not the established routines. Essentially, treatment that comes with a machine or in a pill or an injection is easily adopted; innovation that manages a process better is not. The ready acceptance of the gimmick, the silver bullet or the better machine contrasts with the innate reluctance to change behaviour or the process.

A vivid illustration of the stubborn perverseness of habit as opposed to the instant relief from an external treatment is provided by the behaviour of a few members of the medical profession in the mid-nineteenth century. Administered anaesthetics became available and allowed less stressful, much less painful and more far-reaching surgery saving many lives. At about the same time a Viennese physician discovered that mortality in such surgery, and more especially in childbirth, was greatly reduced if the surgeons washed their hands. Regrettably this change in behaviour, as opposed to the administration of drugs, was widely resisted for almost fifty years. The physicians had not only to change their behaviour but psychologically also accept the compositional notion that they, the healers, were the purveyors of disease.

Unsurprisingly, more tangible reasons for the UK's poor productivity growth are more widely advanced and a detailed analysis by the Bank categorises them into two hypotheses, which are not mutually exclusive. "Hypothesis I" examines the cyclicity of productivity. The Bank states productivity "often deteriorates in the initial stages of a recession" as output falls faster than employment and, during the last recession, this tendency was more marked resulting in a greater productivity fall. Such productivity falls may occur for many reasons. Management are slow to react; some operations require minimum staffing levels; management expect an imminent recovery in demand; the costs of firing and rehiring are too great; and staff get redirected to sales/business development which do not qualify as "output". However, the Bank concedes Hypothesis I is not well supported by the change in productivity during the recent growth in the economy and, moreover, the Bank surveys show "little evidence of spare capacity".

Hypothesis II examines non-cyclical factors, including capital and resource allocation. Capital costs are higher and its availability is lower during a recession and in consequence investment in labour-saving devices is reduced, in product innovation and development and in their introduction and in intangibles such as patents and brands, all factors reducing or pre-empting growth in labour productivity. Further, working capital may be restricted leading to less efficient working practices. Resources normally move from lower return to higher return enterprises, the rate of transfer being subject to many variables. In most recessions the rate accelerates, as during recessions liquidations rise, but in the most recent recession they were relatively reduced, whereas the number of loss-making firms was relatively much higher. In essence, more firms struggle on due to forbearance, the banks' reluctance to admit to the extent of their own financial distress and to low interest rates. In conclusion, the Bank estimates that, of the shortfall in labour productivity relative to the pre-crisis trend in 2013 little should be ascribed to cyclical explanations, 3–4 percentage points might be ascribed to "capital" and 3–5 percentage points to resource allocation and survival.

The significant finding is that there is little cyclical recovery in productivity and little evidence from business surveys of spare capacity. In support of this conclusion the OBR estimates the output gap at less than 0.5%. Thus economic growth can only occur above the normal growth rate by using more labour and, as the unemployment rate, as measured by the claimant count, is already lower than that at the height of the boom, no spare labour is available, this could only be achieved with consequent inflation. Thus national output which is currently 15% below that indicated by the previous trend line is likely to remain so in perpetuity, unless, like some *deus ex machina,* productivity rates can be raised.

There are two separate questions: why is the UK's recent productivity record so woeful and why has the UK lost about 15% of its potential output during the last great recession and record long depression? The answers to both questions are similar: political choice and management errors of the executive. I set aside any judgement of the moral or political basis of culture choice. However such choices do not usually provide optimal economic outcomes, preferring jam now to more jam later; certain stability over less certain but higher living standards; ideological fulfilment over economic management; and appearance over reality. An endemic problem is that the cultural context provides a shield protecting the executive from examination of any inherent weaknesses, so allowing major errors of choice to be promoted. Optimal management is clearly unattainable but better returns and higher productivity will be achieved by reducing the macro-economic errors. Fortunately not all macro decisions depress economic potential, the outstanding example recently being not joining the Eurozone: others have been embraced, often over long periods.

The city of Edinburgh is justly famous for its history, for its beauty and for the achievement of its citizens, but infamous for its economic management. For "locals", who for years witnessed a debacle unfold, it means the "trams" ... a budget cost of £375m for a network rising to £776m for one shorter line and some further infrastructure preparation. Similarly, but not on the streets but secreted behind hoardings, an even greater disaster occurred, a principal example of "planning fallacy" a phenomenon detailed in Daniel Kahneman's: "Thinking Fast and Slow" as follows: "In July 1997, the proposed new Scottish Parliament building in Edinburgh was estimated to cost up to £40 million. By June 1999, the budget for the building was £109 million. In April 2000, legislators imposed a £195 million "cap on costs". By November 2001, they demanded an estimate of "final costs", which was set at £241 million. That estimated final cost rose twice in 2002, ending the year at £294.6 million. It rose three times more in 2003, reaching £375.8 million by June. The building was finally completed in 2004 at an ultimate cost of roughly £431 million. For this Edinburgh does not possess a Sydney Opera House, an exotic and exciting building in a beautiful harbour setting, but something at best utilitarian and practical.

The Invisible or Hidden Hand, the metaphor used by the Scottish economist Adam Smith for social benefit deriving from individual actions forms the basis for two other metaphors, the Benevolent Hiding Hand and the Malevolent Hiding Hand, descriptions of mechanisms guiding the outcome of large-scale projects such as those in Edinburgh. Hirschman, working at the Brookings Institute, Washington DC, studied eleven projects in which unrealistically optimistic planners embarked on unexpectedly challenging plans which had a beneficial outcome, because difficulties in execution of the plan were overcome by unexpected aspects of human ingenuity.

Unfortunately reality is different. Professors Flyvbjerg and Sustein of Oxford and Harvard Universities studied the cost benefit outcomes of 327 major construction projects, much simpler technical projects then those involving IT, new technology or defence, and found that in only 22% of projects did the Benevolent Hiding Hand give benefit greater than the cost overrun of the project, but in 78% of projects the benefit overrun was significantly less. In a sample of 2,062 projects they found that the average unweighted cost overrun was 39% and the benefit achieved was 10% below expectation. They conclude that: "The "Benevolent Hiding Hand" has an evil twin the "Malevolent Hiding Hand", which blinds excessively optimistic planners not only to unexpectedly high costs but also to unexpectedly low net benefits. Studying a much larger sample than Hirschman did, we find that the "Malevolent Hiding Hand" is common and that the phenomenon that Hirschman identified is rare. This sobering finding suggests that Hirschman's phenomenon is a special case; it attests to the pervasiveness of the planning fallacy, writ very large."

Kahneman provides a telling subjective example of planning fallacy. Commissioned to design a curriculum for a course, he met with colleagues once a week for a year and made "good progress" and his colleagues, polled confidentially, estimated completion in two years with a spread from eighteen months to thirty months. The curriculum supervisor estimated that similar groups at that stage who completed their task took seven to ten years, and 40% never completed. Kahneman's group took a further eight years; and the curriculum was never used!

Planning fallacies also masquerade as farce! The British Tanganyika Groundnut Scheme lasted from 1947-1951. The plan required the clearing of five million acres of land, the creation of a new deep-water port, a railway, and the creation of 32,000 jobs. After four years it was abandoned and reports later blamed the failure on inappropriate climate and weather conditions, unsuitable management and machinery and deficient financial control: it appears everything went wrong, or, rather was always wrong. Ironically, the cost of the seed was greater than the value of the crop harvested! The losses exceeded £1.3bn in current value.

The great state enterprise abroad, turned into a farce, has not been repeated. Domestically, the IEA lists thirteen, a baker's dozen, of the worst economic policy mistakes over the last century, of which the worst was entering the Exchange Rate Mechanism, "ERM", in 1990. That decision, following a period of shadowing the D-Mark, a proxy of the ERM, had two separate strands. Politically, and by implication indifference or at best neglect of the economic consequences, the pro-EU faction of the Cabinet wished to align the UK further with the EU and position the UK favourably for any unified monetary system, and, presumably, the subsequent inherent political implications. Economically, as the policy of attempting to control inflation by monetary targeting was not proving successful, another mechanism was sought and a tie to what was considered a more "fixed" currency would assist monetary and inflation control. Also, crucially, it was supported by advocates of a fixed exchange rate, a Mephistophelean orthodoxy that continues to haunt the UK economic policy. The UK was relieved from this major policy error by its summary ejection from the ERM on 16 September 1992 and, liberated from a fixed rate, enjoyed a decade of steady growth and low inflation. The outcome was not unlike that in 1931 when the UK went "off" the gold standard and Sterling was floated.
The lesson of 1931 had been forgotten by 1990, but that of 1992 has been remembered notably by Gordon Brown, who successfully deflected, countered and eventually resisted the political and economic pressure to join the Euro, a decision that has saved the UK from many of the problems currently afflicting the Euro Zone.

The IEA's list of British economic disasters was a "baker's dozen" of thirteen. Any future edition might number fourteen, the number of forgetfulness, as the economic management of the Great Recession in 2008-2009 forgot at least some of the lessons of the Great Depression in 1929-1933, a comparison aptly made this year in "Hall of Mirrors" by Professor Eichengreen of the University of California.

Last year I said: "Thus, the fiscal contraction is being undertaken at a vast cost to the economy and to its productive potential with irrecoverable long-term costs". The context of the Great Recession is: there was a long unsustainable boom; the nature, cause and consequence of the boom were not recognised; the damage from its collapse was inadequately contained; the remedial measures were insufficient; the UK economic policy was restrictive rather than stimulative; the UK economy stagnated or grew less quickly than in a normal recovery; and the increase in the productivity of the UK economy fell. The Great Recession has so damaged the economy that the rate of productivity increase is much lower than is usual in a recovery from a recession leading to a permanent loss in output relative to a normal post-recession economy. There has been a major failure of economic policy, a fourteenth disaster, a forgetfulness of the lessons of the Great Depression (1929-1933).

In November 2008 Her Majesty Queen Elizabeth II visited the London School of Economics and asked Professor Luis Garicano, Director of Research: "If these things were so large, how come everyone missed them?" He replied "At every stage, someone was relying on somebody else and everybody thought they were doing the right thing". Six months later a large group of economists led by Professor Tim Besley of the LSE and a member of the MPC wrote a letter of explanation to the Queen in which they blamed "a failure of the collective imagination of many bright people" and blamed "financial wizards" who had managed to convince themselves and the world's politicians that they had found clever ways to spread risk throughout financial markets and observed "it is difficult to recall a greater example of wishful thinking combined with hubris". The explanation concluded: "....... a failure to understand the system as a whole".

In the boom years leading to the Queen's incisive question little attention was paid to the similarity of the conditions to those leading to the Great Depression. In the 1920s there was an astonishing boom in property, especially in Florida residential and the north-east commercial markets, which the 2000s property booms in the US, UK, Ireland and Spain emulated; on Wall Street there was a rapid increase in value of trendy information-technology companies such as Radio Company of America (RCA) in the 1920s and a similar increase in such companies exemplified by Apple and Google in the 2000s. On both occasions there was a dramatic expansion of credit supporting the property and financial booms accompanied by a growing but differing range of "creative" financing practices and financiers; and, although arising from quite different origins, in the first case economic and in the second primarily political, many of the economies were subject to the rigidities of a fixed exchange rate – the gold standard after 1925 and the Euro system after 1999 - whose inflexibilities inhibited adjustments in individual states. In both circumstances the economies operated within a perceived contemporary cultural umbrella of confidence, now reinterpreted as complacency or carelessness. The 1920s saw the establishment of the Federal Reserve System which ushered in the New Era of economic stability, while the period leading to the Great Recession was thought to be the era of "Great Modernisation" in which the case of the UK moved steadily in Goldilocks fashion, neither too hot nor too cold, inflation within the target range for more than fourteen years and an economic policy based largely/solely on a monetary policy determined by an independent MPC: ever onwards and upwards this largely self-regulating economy, subject only to occasional corrections, had eliminated "boom and bust", securing stability and vital protection from a downturn. In such a stable benign environment, financial institutions, companies, investors and individuals all took more risk but none more so than the commercial banks.

The emergence of conditions similar to those just prior to the Great Depression did not trigger action or even warning by the Authorities. Indeed as late as August 2007, a month before Northern Rock received special Bank assistance, the Bank raised interest rates to 5.75%. Presumably the Bank's economists, as was almost universally the case, as well as the MPC, had not recognised the true implications of the multifaceted boom: a bright horizon, but lit by lightning bolts. Some observers saw a storm ahead, notably Professor Schiller, but not its devastating extent. The calm of the "Great Moderation" reigned.

The precursors to the Great Depression and the later Great Recession were similar, although, due to the reforms undertaken in the Great Depression, and to a greater, but insufficient, understanding of the role of the Authorities, the economic damage of the Great Recession was much less, although its effect persists, most particularly in the Eurozone. Milton Freidman and Anna Schwartz's "The Great Contraction 1929-1933" identified the main policy failing of the Great Depression as the restrictionist policies of the central banks and in particular the Fed's failure to expand the monetary base and to support the banks which resulted in the banking and financial crisis that underlay the basis for the Great Depression. That experience and the regulatory measures put in place then provided an institutional and intellectual basis for an appropriate proactive stance by the monetary authorities as the more recent Great Recession developed.

The perception of the threat of the Great Recession and the response to its early symptoms varied between the US and the UK authorities. The Chairman of the Fed, Ben Bernanke and the head of the Council of Economic

Advisors, Christina Romer, together with other key policymakers, were academics who studied the Great Depression. Ben Bernanke's work published in 1983 "Non-Monetary Effects of the Financial Crisis" amplified and supported Friedman's work. Mervyn King, the Governor of the Bank, also an eminent academic, lacked Bernanke's specialist knowledge and had a different cultural background and theoretical stance. At the time of Northern Rock crisis he warned the House of Commons that providing banks with liquidity except on strict terms would encourage risk-taking. He was concerned to avoid moral hazard and wrote: "The provision of large liquidity penalises those financial institutions that "sat out the dance"". Eichengreen contrasts this strict view with the "lend-now-and-ask-questions-later" approach of the Bernanke Fed. In mitigation, unlike the Fed, the Bank had not been directly exposed to a major banking failure since the City of Glasgow Bank failed in 1878.

Cultural and academic differences may have delayed action by the Bank, but subsequently all relevant Central Banks acted decisively flooding the financial markets with liquidity and openly extending credit to one another and emphasising the scale of support to improve confidence in the effectiveness of their actions. The Banks' reactions proved to be correct, at least initially, but not sufficient nor sufficiently continued to contain a systemic risk different from that obtaining in the 1930s.

The Great Depression was centred on the commercial banks and the resulting liquidity and credit crisis. The systems introduced in the 1930s regulated, stabilised and supported these institutions as bank failures were considered the key event that transformed a "garden variety" recession into a Great Depression and included a Federal insurance scheme for retail depositors to preclude a depositor flight precipitating such a crisis. While such regulations might have been sufficient for the financial system in the 1930s, other components of the financial system had expanded disproportionately, and innovative new financing arrangements had been created. Shadow banking systems of hedge funds, money market funds and commercial paper issuers were lightly regulated or outwith the authorities' purview. For instance the retail deposit insurance, preventing runs on the banks, did not prevent runs on the shadow banking system, as happened when Lehman failed on 15 September 2008. While Lehman took no deposits it borrowed very extensively, issuing short-term notes largely to money market mutual funds. When Lehman failed, shareholders withdrew money from these mutual funds which in turn caused large runs on the money funds' investment-bank parents and this gave the *coup de grâce* to the besieged securitisation markets.

Lehman failed with $613bn of debts, the largest bankruptcy in US history, a failure that echoed around the world, crucially demolishing two separate pillars of confidence: first that very large financial institutions were impregnable and, after Lehman, who would be next; and second that the authorities would always act as a lender/rescuer of last resort for such behemoths, as indeed, had just been demonstrated by the recent rescue of Bear Stearns. The 'run' that followed was on the post-1930s shadow banking system where the carefully controlled regulations and deposits insurance of the commercial banks in the 1930s was wholly irrelevant. The regulators were obsessed with the safety of gunpowder factories but oblivious of the risk of nuclear reactors.

The fateful decision to let Lehman go was made because Bear Stearns was saved. Of the Big Five investment banks Bear Stearns was the smallest and most highly geared, two of whose hedge funds had recently failed and in any emerging crisis or "bear" market it was an obvious "starting" target, especially as it had unsuccessfully attempted to raise additional capital and to sell its residential derivatives holding. When Moody's downgraded the mortgage-backed debt of one of Bear's funds rumours spread on the parent's strength and the other large institutional funds normally providing cash refused to accept Bear's collateral, forcing it within a week to run down its own cash and liquid reserves from $18bn to $2bn.

Without cash Bear could not survive. Bear's CEO appealed to the Fed for support over the head of its regulator, the Securities and Exchange Commission, which had recently "signed off" Bear's account and whose Chairman, on hearing of Bear's appeal to the Fed, assured the US Administration that Bear was "sound and would find a buyer in a matter of weeks". The Fed reacted quickly, disregarding any moral hazard, and relying on powers at the extreme margin of the authorities' mandate under Section 13(b) of the 1932 Federal Reserve Act for action under "unusual and exigent" conditions. The emergency support action and the use of such powers engendered fierce criticism, especially from the Liquidationists, so powerful in the 1930s, typified by President Hoover's Treasury Secretary, Andrew Mellon's, statement then that failure was necessary to "purge the rottenness out of the system" and "liquidate Labour, liquidate Stocks, liquidate the Farmers, liquidate Real Estate ... … … . High costs of living and high living will come down. People will work harder, live a more moral life. Values will be adjusted, and enterprising people will pick up the wrecks from less competent people." Criticism of the Fed came from other sources, too, notably the Republican Party hostile to government intervention[6] and on the grounds of "moral hazard", so emphasised by the Bank. The meltdown of the "nuclear reactor" overrode all principle, all academic debate and, notably, all fine points of "moral hazard".

Bernanke and the Fed supported the US "wider" financial sector at, or even beyond, the strict limit of their mandate. They negotiated a long point-to-point course until Lehman's long jump was followed by a political wall. In contrast the Bank ran out at the first fence. In April 2007 Northern Rock approached the Bank for assistance and the plea was rejected as a "business matter". On 12 September 2007 the Bank wrote to the House

of Commons affirming their belief that the banking system was capable of handling its own problems. Next day, 13 September 2007, the Bank approved a long-sought "liquidity support facility" to be formally announced the following Monday. However, the story was leaked and panicked investors immediately withdrew £1bn, 5% of retail deposits, queues formed, servers crashed and tellers barricaded themselves in for safety. The Governor and the Chancellor, Alistair Darling are reputed to have been reduced to watching events unfold on television in Oporto.

The Bank's philosophy contrasts starkly with the Fed's "hands-on" approach as, to take an extreme view for emphasis, it represented an amalgam of stand-off, moral hazard, blinkered focus on price stability, or inflation targeting, and an insensitivity to the practical realities of finance coupled with an inherent antipathy to the commercial banking sector. For example, David Blanchflower, a former member of the MPC noted that, as late as summer 2008, King did not even see the financial crisis coming. Subsequently when the Bank started reducing interest rates as late as October 2008, it took five months to reach the still current level of 0.5%.

The Central Banks, the regulatory authorities and the governments all operated within, and were to a greater or lesser extent constrained by, systems designed subsequent to and in consideration of the earlier Great Depression. The vast technological changes and the new financial engineering developed since then, coupled with a political move towards and a perception of a robust self-regulating, self-correcting and self-equilibrating system, a capitalist "Holy Grail" rendered them insufficient, but also unnecessary. Some regulators, notably Bernanke, at times managed to implement policy outside these now inappropriate confines before being brought to heel. The UK economic policy, so long a prisoner of political expediency, granted it an MPC watchdog, but bought an inappropriate breed, put it on a short chain and set it to guard the gunpowder factory rather than the nuclear reactor containing a super-heating financial sector.

The meltdown occasioned by Lehman's failure overrode all principles, all academic debate and all finer points of "moral hazard", as the overriding change occurring on 10 October 2008 when the G7 Finance Ministers, during a meeting of the IMF and World Bank, decided to "use all available tools to support systemically important financial institutions *and prevent their failure.*" The equivalent value of the undertakings given was unprecedented: 18% of Eurozone GDP, 73% of US GDP and 74% of UK GDP, and 25% of world GDP taken altogether. The support raised the fiscal deficit in 2007 in the US from 7% to 13% in 2009, in the UK from 3% to 11% and in Japan from 2% to 10%. These fiscal deficits were equivalent to those previously experienced only in wars. For the UK the rise in public debt relative to GDP was the fourth largest in history, exceeded only in the Napoleonic and the First and Second World Wars.

This massive, decisive action saved the day. Such crisis policies were endorsed by the leaders of the G20 countries in 2008 and again in 2009, saying on 25 September 2009: "We pledge today to sustain our strong policy response until a durable recovery is secured. We will act to ensure that, when growth returns, jobs do too. We will *avoid any premature withdrawal of stimulus*". However, less than a year later, after the Toronto summit, in June 2010, when all the G7 economies were still operating below the pre-crisis level, the UK and Eurozone being only at 94% of the pre-crisis level, the G7 announced: "Recent events highlight the importance of sustainable finances and the need for our countries to put in place credible, properly-phased and growth-friendly plans to deliver fiscal sustainability, differentiated for and tailored to national circumstances"; and: "Advanced countries have committed to fiscal plans that will at least halve deficits by 2013 and stabilise or reduce government debt-to-GDP ratios by 2016". A reversal of fiscal policy from counter-cyclical action to austerity was announced, even although aggregate demand was low and expansionary monetary policies were near their effective limit.

In practice, the 2010 G20 announcement acknowledged actions already being taken by most governments for varying reasons. In May 2010 the UK incoming coalition government introduced an austerity budget saying: "We are going to ensure, like every solvent household, that we buy what we can afford; that the bills we incur, we have the income to meet; and that we do not saddle our children with the interest on the interest (sic!) of the debts we were not ourselves prepared to pay". The Chancellor evokes echoes of Thatcherism and the classic allusions of Micawber and Polonius, but economic management is neither morality nor abhorrence of fecklessness, but an assessment of net balance. Colourfully put, Samuel Brittan observes: "the Deficit should be a policy variable rather than targeted to meet a dim accountant's idea of balance". This variable has averaged 112% over the last 324 years and is forecasted by the OBR to be 83% in the current year dropping steadily to 68.5% by 2020-21. There is no statistically valid analysis that shows an inverse relationship between the % debt and growth of GDP, at least within the "normal" range of debt.

The 2010 *volte face* had many political origins, most obviously the inflation obsession in Germany, but it had a timely but ill-founded economic prop in Reinhart and Rogoff's paper: [237] "Growth in the Time of Debt", published unfortunately un-reviewed, which contended that at debt levels above 90%, GDP growth was "roughly cut in half". The Chancellor, George Osborne, speaking in 2010 said: "As Rogoff and Reinhart demonstrate convincingly, all financial crises ultimately have their origin in one thing ....... debt"." Unfortunately subsequent analysis of their results showed statistical, methodological and mathematical error and evinced this

criticism: "When properly calculated, the average GDP growth rate [when debt is] over 90% is actually 2.2%, not – 0.1%, as published in Reinhart and Rogoff ....." Oh dear!

Nobel Prize-winning Princeton economist Paul Krugman criticised the use of this analysis to support economic policy as follows:- "What the Reinhart-Rogoff affair shows is the extent to which austerity has been sold on false pretences. For three years, the turn to austerity has been presented not as a choice but as a necessity. Economic research, austerity advocates insisted, showed that terrible things happen once debt exceeds 90 per cent of GDP. But "economic research" showed no such thing; a couple of economists made that assertion, while many others disagreed. Policymakers ....... turned to austerity because they wanted to, not because they had to."

Importantly, even if Reinhart and Rogoff's inverse relationship had been accurate, it never clearly established causation – perhaps a low growth in GDP engendered a high growth in debt and not *vice versa*.

The UK fiscal consolidation, 5% of GDP between 2009 and 2012, was the most severe undertaken by any of the large, advanced economies. After the recession growth had recovered to 1% of GDP in the first quarter of 2010 before its effects were felt. Q4 2010 showed no growth, although the economy grew 2.0% in 2011 before dropping to 1.2% in 2012. The OBR estimated that the austerity policies reduced growth by 1.0%, 0.7% and 0.3% in the years up to 2013, when the initial impact of these earlier restrictive policies began to fade.

UK economic growth since the start of the Great Recession has been poor gaining less than 5% in seven-and-a-half years and the recovery, compared with previous recessions, particularly slow. On this occasion there has been a very small change in output per hour since the onset of the recession in Q2 2008 which, after falling 5% at the trough of the recession, has only very recently regained the pre-recession level. By contrast, productivity in the US is 7% above the pre-recession level. The "Productivity Puzzle", as the Bank terms it, is that, whereas 24 quarters after the recessions starting Q2 1990, Q2 1961, Q4 1979 and Q2 1973 productivity had grown by 18% following the 1990 and 1961 recessions and by *c* 11% following the other two, the productivity post-Q1 2008 was still 4% below its pre-crisis level.

As shown earlier, the Bank argues that productivity is pro-cyclical, ie in an expanding economy there is less "wasted time" and everyone and everything works harder, productivity is higher, the reverse of what occurs when the economy contracts. Its first hypothesis is that as the cycle peaks the economy recovers its trend level of productivity. Unfortunately, contrary to experiences in earlier recessions, this has not happened on this occasion and even in the Bank's inflation report (November 2015 p32) productivity growth is only expected to be 1%, rising to 1¾% in 2018, far short of the 1998 – 2007 average of 2¼%. Thus there is no projected catch-up. The Bank also projects a lower level of productivity growth in the future than historically. The result is that not only has the UK lost the spurt in the growth in productivity normally expected since the recession but the UK economy is also now expected to experience a lower increase in future productivity: a double whammy!

Explanations for so significant a downward shift in productivity abound and some have been illustrated earlier, but there is no convincing comprehensive hypothesis. However, such a hypothesis should include the following. An overriding characteristic of this recession is that it is a "financial" recession, and, but partly in consequence of this, has been exceptionally long – longer than the 1929-1933 Great Depression – and on both counts, and compounded, more far-reaching. More damage has been done to the productive potential of the UK economy, to nascent industries, to entrepreneurship, to the motivation to change to take risks to train for the future, to move on and to accept job restructuring than in previous recessions. A mentality to avoid risk, to give up, to retire and to accept defeat by increasing bureaucracy is all pervasive. An aura of fear of everything and of excessive back-covering and unnecessary buck-passing appears prevalent. My neighbours' house purchaser's mortgage was delayed over an assessment of how much per month it cost to feed the cat .... really! In many parts of the UK the animal "spirits" seem quiescent, exhausted perhaps by a long pursuit of debt recovery with perhaps some of those surviving the long recession finally driven off by the effects of the 2010 policy of expansionary fiscal contraction. From this flowed increased taxes, lower investment in productive assets and a continuing restriction of credit. A particular folly was to insist on the banks increasing their capital ratios at the expense of reducing their credit loan books. The worst of the 1929 – 1933 mistakes were avoided but, because that was so, the expansionary measures of 1929 – 1933 were not undertaken and an earlier fuller recovery was lost. Mervyn King said: "Policymakers prevented another Great Depression", but instead we experienced a Great Recession about which Eichengreen says policymakers " ..... could have done more. And their failure to do so largely explains why the recovery continues to disappoint." And, indeed, the great mistakes political and economic, of this period will continue to weigh on the UK economy.

Fortunately some external factors are benefiting the UK economy. There has been a dramatic fall in oil prices since the peak of *c*$115 for Brent Crude in June 2014 and the UK remains as a significant producer of oil, the current domestic supply is only 0.9% of 2014 world output but its consumption is 1.6%. The fall in prices is accompanied by a fall in most commodity prices benefiting the commodity-importing nations, such as the UK, at the expense of the commodity-exporting countries. The Economist's Industrial Index has fallen 24.8% in the

last year, following a fall of 7.9% in 2014. Price falls in specific other important commodities, particularly iron ore and copper, have been very significant but have been eclipsed by spectacular falls in oil prices where, for instance, the Economist West Texas Intermediate Oil Index has fallen 38.0% and then 40.5% in the last two years.

Interestingly, even after these falls, commodity prices are still above the real long-term price trend which, apart from three bubbles up and one "anti-bubble" down, has been within 20% or so percent of the same real average since 1680. A small bubble raised the index 50% in the 1920s and larger bubbles just after the 1970s oil shock and the recent boom raised the index by two and two-and-a-half times. A return to the historic trend line would require further price falls equivalent to an oil price of *c* $30, a figure that does not seem so far away as when I first drafted this statement!

The reduction in the industrial commodity prices is not due to a recession or a contraction in the growth of world GDP which the EIU expects to grow by 2.4% this year and 2.6% in 2016, but due to a greater marginal increase of supply over demand. In 2014 , oil production increased by 2.3% but consumption by only 0.8%, a marginal increase in supply of (88673 – 96579) 2.0m barrels per day as opposed to a marginal increase in consumption of 992086 – 91234) 0.852m barrels per day.

The Economist describes the build-up of the commodity "super cycle" very colourfully: a decade or so ago "Scotland was hit by the Great Drain Robbery, the disappearance of fifty manhole covers in Fife. This evidenced very starkly the beginning of a new era in commodity markets, spread by an insatiable demand from China ....... scrap metal prices and so thefts soared; Africa was overrun by Chinese engineers; Australia elected a Mandarin-speaking Prime Minister; and emerging markets from Argentina to Zambia relished the rising value of their farmland and mines." Such rising demand increased Bloomberg index prices by 60% in the five years before the Great Depression and generated expansion plans that now appear grandiose, which, because of the long cycle times between a decision to expand production and output, are only now in production, with the result that most major raw materials are over-supplied. The continued investment over the years was assisted by an over-estimation of the rate of the continuing expansion of Chinese demand, which consumes half the world's metals such as iron, aluminium and zinc; the reduced extraction cost for mining; the exuberance and ambition of the miners; and the availability of low-cost capital: a heady mix! Amongst other extravagances this mix permitted Gina Reinhart, named as the world's wealthiest woman, to open the $13bn Roy Hill iron ore mines in October 2015, funded with an $8bn loan, to ship ore to China. The mine has a nominal output of 55m tonnes a year, equivalent to the current US output.

The change in the balance between supply and demand in the oil market was not evident until later in the economic cycle after recovery from a sharp fall in average price in the 2009 recession to $16.67 rising to $79.50 in 2010, $111.26 in 2011, $108.66 in 2013 and $98.95 in 2014, an average including a high of $115 in June 2014 to a low of $50 in December 2014. In the five years since the 2009 recession world output of oil increased by 5,484 thousand b/d but consumption only increased by 4,219 thousand b/d and of the increased production 4,088 thousand b/d was largely accounted for by increased US exploitation of tight reserves in shale.

The oil market has been surreal, like "Alice through the Looking Glass" being distorted by the operation of OPEC, the cartel controlling 41.0% of world production which since 1973 has operated to give a back-to-front, upside-down mirror image. In a competitive market the lowest cost producers would maximise output and higher-cost suppliers enter the market as and when the price was commercially attractive. Thus the highest cost producers are the marginal suppliers. In the oil market the mirror image applies as by contractual agreement or convention the lowest-cost producers, the OPEC cartel, are the marginal suppliers, led currently by Saudi Arabia whose 2014 output was 11,505 b/d or 12.9% of world production. In 2013 Saudi declared that it no longer intended to increase its oil capacity beyond its current level of 12,500 b/d before 2040 because of the growth of supplies elsewhere and indicated that it was no longer prepared to adjust its output to stabilise prices. That Saudi decision reinforced by what the FT reports as "rancorous" meetings of OPEC recently demolished what was the effective keystone in the oil edifice, a decision that must not have been taken lightly, but one which is consistent with market realities.

In previous downturns in the oil market which OPEC manipulated Saudi had made large and disproportionate production cuts. In the 1980s downturn Saudi reduced output from 17.6% of world output in 1981 to 6.3% of output in 1985 resulting in an output of 3,388 thousand bpd in 1985 compared with 9,900 bpd in 1980.

Similarly in the late 1990s it reduced its share of world output from 13.1% to 11.7%. In both cases equivalent cuts were not usually made by other OPEC partners. The cost of manipulating the market by Saudi with whatever small assistance could be gained from other OPEC countries probably appeared very high. The benefit from manipulating the market may also have appeared very much smaller, as the present value of the oil reserve maintained by restricting production was likely to be much lower given increased reserves. In 1978 the ratio of global reserves to annual production, the 'R/P' ratio, was below 30 but by 1996, about twenty years later, although oil production had risen considerably the R/P ratio was over 40 and in 2014 in spite of a rise of about

25% in production the R/P ratio was 53: without further finds there is enough oil for over half a century at current production!

The concept of oil supply stretching so far into the future undermined theories of shortage, finite supply, ever-rising prices and "peak oil", a theory already disproved in the second major energy source, coal, supplying 30.03% of world energy in 2014, just below oil's 32.57% . Significantly there are over 100 years of "proved" coal reserves (R/P 110) at the current consumption rate. The UK has significant coal reserves whose mining under existing technical and economic conditions seems less and less likely. In June 2000 Ahmed Zaki "Sheikh" Yamani, the Saudi Oil Minister in OPEC for 25 years said: "The Stone Age came to an end, not because we had a lack of stones, and the oil age will come to an end not because we have a lack of oil. Thirty years from now there will be a huge amount of oil – and no buyers. Oil will be left in the ground."

The collapse in prices is reducing Saudi revenues very substantially but lower prices now, coupled with the perception of continuing lower prices, will eventually restrict supplies with higher-cost oil being uneconomic. The cost of this long-term gain is being shared by all OPEC members and all other producers and may represent a victory, a rather hollow one, for Saudi. A better option, but one presumably not possible, would have been to obtain production cuts from all OPEC producers as I suspect a carefully-judged production system might have permitted a "Goldilocks" position of slightly lower prices (cf c $40 now), slightly lower outputs but a market price sufficient to exclude high-cost oil such as Arctic, Alaskan tar sands and small depleted marginal fields.

Unfortunately for OPEC the required conditions for a cartel to operate, which existed in the second half of last century, no longer prevail. Then the OPEC cartel was endowed with the three necessary qualities for an effective cartel: strong discipline; a dominant market share; and high barriers against entry by outsiders which patently no longer apply. Discipline within the disparate OPEC group, an eclectic group of unlucky thirteen countries including enemies such as Iran and Iraq, lacking cultural, religious or social coherence, is absent; the market share has been severely attenuated since the heady days of the 1970s; and the technological revolution brought about by "fracking" has allowed new entrants to the market for a tiny investment compared with all other new oil sources.

New entrants can have a cataclysmic effect on the market, given its economic characteristics, as "Dad" Joiner demonstrated nearly 100 years ago, very colourfully, as would be expected in 1930s Texas. "Dad" Joiner, a 72 year-old, out-of-luck wildcatter, drilled for three years using third-hand equipment, subject to frequent breakdown, in a remote pine wood with crews often paid with "royalty rights". And he did this in an area knowledgeable geologists considered devoid of oil, guided by a fake prospectus prepared by Doc Lloyd, the vendor of Dr Alonzo Durham's patent medicine. On 3 October 1930 it blew! The field was 45 miles long by seven-and-half miles wide, unlike anything ever previously known. Within months 1,000 wells had been completed, producing over 500,000 bpd, a large amount even today. When the oil from the "Black Giant", as it became known, hit the market, prices collapsed from an average of $1 ($13.65 in 2015 prices) in 1930 to 15 cents a barrel with distressed sales at 6 cents or lower. "Dad" Joiner epitomised the criterion for success enunciated by Daniel Day Lewis in "There will be Blood": "Rise early, work hard, strike oil". "Dad" sold his interests to escape the myriad of claims on the royalties he had given, sometimes eleven times over on the same ground, to keep the "Black Giant" rig working. He wildcatted for another fifteen years, and, as his biography reports: "Romancing his secretary and other young women" until he died aged 86. But he never "hit" again – on the oil!

Black Giant's output rose rapidly reaching 1m bpd in August 1931, equivalent to half the total American demand; and the price fell to 13 cents a barrel! The early production at Black Giant created unheard of wealth in rural Texas selling for $1 and costing about 80 cents, the profit on the first, say, 100,000 barrels per day was $100m per year, but at 13 cents ......!

Over the next ten years a range of overlapping State and Federal laws and voluntary arrangements and later import controls on Venezuelan oil were used to stabilise the oil price at $1.00 to $1.18 per barrel from 1934 to 1940. The US measures were in pursuit of a mix of economic, political and military objectives. The current fall in the oil price is not as dramatic as that resulting from the Black Giant but it is dramatic: from $115 in June 2014 to $38 in early December 2015 is a 67% fall ..... so far!

The outcome of the current collapse in prices will be quite different from that which "rescued" and preserved the strategic US oil industry and it is likely to take years to consummate. No one country has the incentive to effect the necessary production controls, the OPEC cartel is currently more antagonistic than ever and Saudi's economic advantage lies in forcing production cuts elsewhere. A political reconciliation and/or an assessment that, whereas OPEC members (and possibly outsiders) continue to "hate" each other, they "hate" the cost of non-collaboration even more, a common source of political settlement – the lesser of two evils – and would lead to the re-establishment of output controls.

A contraction in supplies takes time, longer than some OPEC suppliers are thought to have expected. Estimates of the future oil price have curtailed the prospective future supply and some high-cost sites, notably the Shell Alaskan drilling site and its Canadian oil sands site, have been abandoned after spending $8bn. Shell is reducing investment elsewhere by $7bn and most producers have announced similar capex cuts, the vast majority in drilling. Significantly, only in the Middle East is an increase of 15% in capex expected, presumably because it is a low-cost reserve. Such investment cuts have no measurable effect on present or near-future prices.

In contrast the effect of current prices on current production is much greater, but modulated by the cost pattern and by the expectation of future prices; because the oil price today is $38, wells with costs of more than $38 will not automatically be shut. If the price is going to rise above $38, then currently unprofitable wells will become profitable again and to close them because of a short-term blip would be the wrong decision. Similar sums can be done on the costs of temporary shut-downs when that is technically possible.

Importantly, the cost of the output from a well does not determine whether it should be shut down, as an extreme example for the Canadian tar sands illustrates. Prices there for the very heavy oil are currently $23 and the cost of oil from such sands, one of the very highest cost sources, is estimated to be $60 to $90, well above the $23 selling price. However, the operating costs of the Kearl Oil sands in Western Canada are only $11, well below the selling price. The high cost of the project lies in the spent capital costs and while there is a cash surplus after financing costs the plant will continue to run, possibly for another fifty years. The company lost c $405m in the second quarter!

UK operating costs are high, more than double the world average cost. The average is $29 with presumably a wide dispersion around this mean and for some fields will already be over $38. These operating costs do not take account of finance costs, on-going capital costs such as replacements and renewals of capital equipment, and the running costs, the overheads, of an oil business. In August when Brent Oil was about $50 consultants Hannon Westwood reported that up to forty North Sea platforms were likely to be closed and in Scotland Wood Mackenzie predicted that 140 of the existing 330 fields in the UK North Sea would close within five years even if the price returned to $85. Even in February this year, before the current price fall, Oil and Gas UK reported cash losses in the North Sea were £5bn and that most of the 126 oil exploration and production companies on the LSE were loss-making. Clearly, even with a major rise in prices, much of the North Sea oil province will close and if current prices continue I suspect almost all of it will be closed.

Fracking differs from all other means of oil extraction because of the very short cyclic time. Unlike deep-water wells which require years of expensive investment and produce for nearly 50 years like the Brent Field the fracking production cycle is very short. Drilling takes only three to five months and as the rate of depletion is very high, with most of the oil recovered within two years the full overall costs of the well and the profit from it over the cycle time can be accurately determined: effectively production can be turned on and off!

Until recently fracking was considered to be profitable at $80 – $100, but productivity of shale oil production (initial production per rig) has been rising at over 30% pa since 2007 increasing the initial output from under 40bpd to around 400 bpd contributing to a substantial reduction in cost, and most shale oil is profitable at $50 to $60, the full cost including finance over the production cycle. In Economist's terms the supply response to change in price is much quicker and greater than the giant off-shore, deep-water, Arctic or tar sands resources. Average break-even costs for fracking were estimated by Rystad earlier this year to be $60 ± $12 for 75% of wells, a cost similar to most other sources except the cheaper offshore shelf reserves at $45 and onshore Middle East at $30 ± $10.

If OPEC does not restrict supplies prices will continue at the current low levels until the market clears. Futures prices are for Brent to return to $50 in mid-2017 and to $60 in 2020, five years' time. In such a price regime few new high-cost schemes will be undertaken and high-cost producers, such as many in the North Sea, will abandon production. High-cost shale will also be inhibited. However, as soon as prices edge up the rapid response of shale producers will result in an increase in production. In consequence the oil market will become conventional – the lowest-cost producers would maximise output and the highest-cost supplies would enter the market as and when the price was commercially attractive. Previously under OPEC control the reverse was the case: OPEC, the lowest-cost producers, particularly Saudi, acted as "swing producer". I repeat what I said in 2013: "The increasing supply from fracking, coupled with other higher-cost sources such as oil sands and Arctic oil and the increasing competition from gas, where supply is likely to benefit even more from fracking, seem likely to outweigh the continuing but differing supply interruptions as exemplified by the "Arab Spring". Prices will fall from the present $100, but on present technology a limit of $60 to $80 seems likely as that is currently the cost below which most oil from most unconventional sources, including fracking, becomes uneconomic" with a modification, due to the subsequent technical changes in fracking which have reduced costs and lowered the limit by $5 - $10. Politically, as Alan Greenspan writes: "OPEC has ceded to America its power over the price of oil".

The UK economy as a whole will gain as oil price falls of $10 transfer roughly ½% of world economic output from oil producers to consumers who, having a higher propensity to spend than producers, would boost demand. Lower oil prices yield significantly lower inflation as immediately evident in fuel prices but also in lower production and distribution costs in the economy, and will encourage manufacturing, particularly high-energy manufacturing, and create import substitution. The economy will expand recouping increased taxes.

Unfortunately the UK oil and gas industry is predominantly Scottish, an industry that was predicted just before the 2014 referendum to produce and sell oil at $115 and to be worth some £15bn each year in UK taxes. Because of the quite astonishing reduction in profitability this industry is now likely to contribute only £100m in taxes.

The cuts in investment and in employment in the UK oil industry will be felt largely in Scotland and within Scotland in the North East, particularly Aberdeen. The oil industry "supports" 375,000 jobs and until recently expected to shed only 35,000 over the next five years. In the year to September 2015, before the recent price falls, Scottish unemployment rose only in Aberdeenshire and Aberdeen by 38.8% and 30.2% respectively. A more rapid contraction of the sector will result in greatly increased job losses.

The Scottish economy has two other minor restrictions to its growth compared with the UK. The financial crisis affected the Scottish financial sector disproportionately badly and significant Scottish jobs were lost or relocated, a continuing process. This is particularly disappointing as employment in this sector was one of the prime growth areas prior to the crisis. Politically it is felt by most businesses that the continuing uncertainty about Independence, reinforced by the undoubted strength and political flair of the SNP is adversely affecting business. The ITEM Club report says: "Surveys for the Scottish economy paint a relatively, but not universally, downbeat picture". In spite of this, growth is still expected to be satisfactory with 1.9% in the year to Q2 as opposed to 2.4% for the UK.

The main determinant of Scottish economic growth in 2016 will be that of the UK where prospects continue to be favourable and the OBR report UK growth to be 2.4% in 2016 and to continue at that approximate level until 2020, figures broadly in line with other forecasters. Such steady growth appears satisfactory but it emphasises that the UK economy has had seven thin years during the depression with no subsequent fat years: unlike previous recessions there has been no accelerated "catch up", what it lost in terms of growth and productivity gain has been lost forever, and, like Billy Bunter, we are finding that a meal missed is a meal lost forever. If the Government had read their economic cook books in a different way, then we would have escaped the effects of such forced austerity.

**Property Prospects**

In the previous property investment cycle the CBRE All Property Yield Index peaked at 7.4% in November 2001, then fell steadily to a trough of 4.8% in May 2007, before rising in this cycle to a peak of 7.8% in February 2009, a yield surpassed only twice since 1970, on brief occasions when the Bank Rate was over 10%. Since then yields fell to 6.1% in 2011, rose by 0.2 percentage points in 2012 and fell steadily since then. This year it has fallen further from 5.6% to 5.4%.

The yields have fallen in all components of the Index, as occurred last year, except the All Retail Warehouse Index which is unchanged after falling from 6.1% to 5.2% last year. As last year yields fell most rapidly in the All Industrial sector from 6.4% to 6.0% and this year there was a similar fall in the All Shopping Centre Index to 4.7% with small changes of 0.26% and 0.34% in the All Shops and All Office sectors to 5.10% and 5.20% respectively.

For the last two years I have noted that within each component of the All Property Index the largest fall in yields took place in the London area but this year that pattern has been reversed apart from Central London shops which fell by 0.45 percentage points to an astonishing low of 2.86%, representing a large capital gain of 15.7%. Within the All Office sector falls of about 0.5 percentage points occurred in Southbank, South West, Yorkshire and Humberside and the North East regions. Falls of over 0.5 percentage points also occurred in all UK Industrials outside London, South East and East with even larger falls in the South West, Yorkshire and Humberside, Scotland and in the North East, of almost 1.0 percentage points with the largest fall of any sub-sector.

Apart from the falls in yields for both Central London shops and offices, falls in yields have been greater in many classes of property elsewhere, indicating that the high spread in yields between the South East and other areas of the UK is at last narrowing, or "compressing". Perhaps the improvement in the UK economy is at last extending beyond the South East.

The peak yield of 7.8% in February 2009 was 4.6 percentage points higher than the 10 year Gilt, then the widest "yield gap" since the series began in 1972 and 1.4 percentage points wider than the previous record yield gap in

February 1999. The 2012 yield of 6.3% represented a record yield gap of 4.8 percentage points, due largely to the exceptionally low 1.5% Gilt. The yield gap in 2013 increased to 3.7% as the 10 year gilt yield rose to 2.4%, or 0.9 percentage points, and outweighed the 0.2% fall in the All Property Index to 6.1%. In 2014 the gilt yield was unchanged but the fall in the All Property Yield of 0.4 percentage points to 5.7% narrowed the yield gap to 3.3 percentage points This year the small fall in yields to 5.4%, offset by the fall in Gilts to 1.8%, has widened the yield gap to 3.6 percentage points.

The All Property Rent Index, which apart from the brief fall in 2003, had risen consistently since 1994, fell 0.1 in the quarter to August 2008 and then fell by 12.3% in the year to August 2009. Since 2009 there have been small increases of only 0.9%, 0.1% and 0.6% in the years to August 2012, but since then rental growth has improved slightly by 2.6% and 2.9% in the two years to 2014 and has risen by 5.0% this year. The Rent Index,[304] currently at 186, is still below the June 2008 peak of 190. The All Property Rent Index rise of 5.0% comprised rises of 8.0% in All Offices and in All Industrials, a more modest rise of 3.0% in All Shops, and smaller rises of 1.6% in All Shopping Centres and 0.6% in All Retail Warehouses. City and Southbank office rents rose 12.0% and all other South East area rents rose by 7.0% to 10.0%, rises unequalled in outlying areas apart, surprisingly, from Yorkshire where rents rose 9.8%. West Midland rents had the lowest increase of only 1.0%, but Scotland and the South West were only slightly improved at 2.0%.

Industrial rents rose by 12.2% in London and by 10.3% in the South East. In contrast, rents are unchanged in the North East and, improved only by 1.0%, 2.4% and 3.0% in Yorkshire, the North West and in Scotland respectively. Rental growth in the "South" continues to exceed that in the "North". In shops the difference in rental growth between Central London shops and the rest of the UK is exceptional. London shop rents rose 11.4% and have risen at 9.2% compound for the last five years. Elsewhere the highest growth rate is of 1.6% in suburban London with many areas having rental falls, as much as 3.8% in East Midlands. The average shop rent, excluding London, the South East and Eastern regions, has fallen 2.1% compound for five years. All Shopping Centres and All Retail Warehouses have had rental growths of 1.6% and 0.6% respectively this year and of only 1.3% and -0.5% compound for the last five years. Since the depression began seven years ago the All Property Rent Index has fallen by 2%, as All Shops have fallen 5% and All Retail Warehouses have fallen 17%, falls offset by small rises of 3% and 5% in Industrials and Offices. Since the market peak of 1990/91 the CBRE rent indices, as adjusted by RPI for inflation, have all fallen: All Property 30%; All Office 34%; All Shops 23%; and All Industrials 34%.

Property Investment, as measured by the IPD All Property Index, returned 14.7% in the year to 31 October 2015 of which the income return was 5.6% and the capital return, 9.1%. Office and Industrial property returned 19.9% and 18.8% respectively but Retail Property returned only 9.1%. This time last year the All Property Index return was 20.1% of which the income return was 7.0% and the net capital return 13.1%. Previous returns in the years to 31 October were 7.4%% (2013), 3.1% (2012), 8.7% (2011), 20.4 (2010) and minus 14.0% (2009), and minus 22.5% in the calendar year 2008 when in December alone the index fell a record 5.3%. In the year to 31 October 2015 the All Property Index return of 14.7% and the Property Equities return of 18.6% were significantly more than the 4.4% return from Bonds and the very poor return of 0.1% from Equities, the second year in which Equities returned less than 1.0%.

Property Investment returns for 2015 are forecast at about 14.0% [310-3], slightly less than the high 17.8% IPD Index return to December 2014 which included a large 12.0% increase in capital values. Last year's forecasts for 2015 were for a return of about 11% as almost all forecasters then expected lower capital returns of 5% rather than the over 8% for 2015 now likely. All forecasters expect total returns for 2016 to moderate as capital growth is expected to be much lower than in the previous two years and rental growth is also expected to slow slightly. Capital growth gave high returns of 11.9% in 2014 and is expected to return 8.3% in 2015 and to reduce further to 4.1% in 2016. Rental growth of 3.0% in 2014 is likely to be 3.8% this year but to fall back to 3.3% in 2016. Retail rental growth in 2016 is expected to be less than 2%, far below the 4% and 5% expected for Industrials and Offices.

The IPF August Survey Report forecasts overall returns of 9.2% in 2016, well above the forecast of 6.6% made for 2016 last year. Colliers, who consider the Retail Sector will have much lower returns than the IPF, forecast that the total returns in 2016 will be 7.8%, but CBRE predict higher returns and expect a total return in 2016 of 10.1%. The IPF forecast return for 2017 drops to 4.9% and to below 4.5% for 2018 and 2019, implying that, as the assumed rental return is expected to be over 5.0%, capital values will fall as a result of rising yields.

I suggest this long-term forecast is slightly pessimistic. Interest rate swaps rise only 1 percentage point to 2% between six months and ten years, reflecting a growing economy and rising inflation, factors likely to cause increased rents, sufficient to offset any change in yields. Also, agents make a strong case for continuing growth in the value of commercial property. CBRE suggest that: "There is a wall of capital out there that wants to be invested in real estate ....." contributing to the current and prospective low yields and "...... we think it [pricing] can stay high". Cushman and Wakefield report that the "... availability of financing is at a post-crisis [2008] high ..."

" ........ banks are becoming active in the market and debt fund insurers and private equity are very active at the prime end of the market and, increasingly, in the secondary market .....". They also report increased interest in the "regions". These trends seem likely to persist and, if so, the returns to 2019 will be higher than the IPF forecast.

This time last year forecasters for house prices in 2015 were optimistic. HMT's "Average of Forecasts" was for a rise of 5.8% and the OBR forecasted 6% in 2015, figures in line with current estimates of 6.6% by the HMT survey and 5.5% by the OBR. Increases in house prices in the twelve months to the end of November 2015 are reported as 9.0% Halifax, 3.7% Nationwide, and 6.0% Acadata. The average annual figures mark a wide disparity in performance between regions. In November 2014 prices in England and Wales were rising at 10.1% per annum, but, excluding London, only at 7.9%. In the summer of 2015 the average England and Wales price rose by 4.7%, but, excluding London by 5.2% as areas outside London rose more quickly although that reversal is now less marked. In the autumn the greatest annual rises in house prices were in the South East, 7.1%, and East Anglia and East Midlands, 6.1%. The North and Wales had the lowest annual rise of 2.3% and 1.2% respectively. Within the South East there were large variations as Reading prices rose 18.3% closely followed by Luton at 17.3%, such rises possibly indicating a "ripple out" from London. The cooling of some high London prices, together with the higher stamp duty, may be reflected in the relative performance of the individual London boroughs. The average price in the two most expensive boroughs, Kensington and Chelsea and City of Westminster, fell 17.6% and 6.2% respectively in the year to October 2014, but the four lowest-priced boroughs rose by an average of 14.7%. Of the 33 London boroughs, the top eleven by price rose by 4.6% last year, the middle eleven by 10.2% and the bottom eleven by 12.0%, possibly evidence of the "rippling out" hypothesis.

Outside London, higher-priced properties continued to rise more rapidly. In the last twelve months houses in the top quartile by price – above £260,189 rose by 7.0% but those in the bottom (first) quartile – below £158,170 – rose only by 1.3% with the second and third quartiles rising by 3.1% and 5.5% respectively.

A continuing anomaly in the reporting of house prices is the disparity between Halifax and Nationwide indices as Halifax consistently reports much higher figures than Nationwide. This disparity is particularly apparent in Scotland where, for the year to November 2015, Halifax reported an increase of 9.0% and Nationwide 3.7%. This disparity is particularly noteworthy as both mortgage providers exclude cash sales and calculate their indices on the 'price of an average house', a conceptual house, rather than on the actual average prices paid for houses. However, the Halifax price for its "average house" is £204,552, higher than Nationwide's "average house", suggests that it is concentrating on houses in the higher price bracket where price rises have been greater.

In Scotland, Acadata average house prices have only risen 1.6% to £168,843 in the twelve months to October 2015, much more slowly than all the English regions. In the north of England, with the lowest average price of £154,625, prices rose by a very modest 2.3%. The market for houses in "poorer" economic regions seems poorer than in better regions, provided they are outside London.

The Scottish housing market has been distorted by the introduction of the new tax thresholds and rates in Scotland on 1 April 2015 under the LBTT. The tax rate is 10% on value above £325,000 and 12% above £750,000. The volume of higher-priced houses rose sharply just before the 1 April deadline and in March the average house was £215,000 compared with *c* £170,000 over the previous and subsequent months. In March 2015 ninety houses valued over £1m were sold and none in April 2015, compared with an average of 132 per year in the two previous years. A £1m house now costs £78,350 in LBTT in Scotland and £43,750 in England and Wales, a difference in tax of £34,600. *Per contra* tax will be less onerous on lower-priced houses in Scotland compared with Stamp Duty in England and Wales. According to the Finance Secretary the increase in the threshold to £145,000 takes 50% of Scottish transactions out of the tax altogether.

Over the last few months the one-off distortion caused by the LBTT changes has largely worn off except that prices in August and September of detached houses, averaging at about £250,000, have dropped in price by 2% year on year, presumably an adjustment to the increased tax on the purchaser. Sales of all properties have increased 6% in the July – September period but there was no change in the number of detached houses sold. Overall, the market has improved over the last few months with monthly increases in value of 0.8%, 0.5% and 1.0% and the annual increase rising in October to 1.6%

The OBR expect house prices to rise by about 5.0% in 2016 and by 28.4% over the next five years. HMT expect prices to rise 6.1% in 2016 and then by about 5.0% each year for the following three years. Forecasts of around 5.0% for 2016 are also given by Countrywide, JLL, RICS, Savills and Strutt and Parker. A lower figure of 4.0% is given by Halifax and Knight Frank and Capital Economics forecast only 2%!

Savills provide forecasts for second-hand houses for up to five years for both Prime and Mainstream markets. In general the forecasts are slightly more conservative than this time last year, probably due to increased taxes, the slowdown in Central London, the controls being placed on mortgage lending such as the MM Review and

the prospect of higher interest rates sooner rather than later, an assumption that may not take into account the economic effects of the continuing fall in oil prices. The mainstream UK market is forecast to grow by 5.0%, the same as last year, but the five-year forecast is for 17.0%, less than the 19.3% last year. Scottish prices are expected to rise by 3.0% in 2016 and by 14.2% over five years, but the forecast last year was for 4% in 2016 and for 17.6% over five years. The highest growth in value over the next five years is forecast to be over 20.0% in the South East and East of England, presumably a ripple effect from London. Prime market growth prospects for 2016 are generally poorer than those made last year, the Scottish market for instance is only expected to rise 2.0% in 2016, down from a forecast rise of 4.0% made last year. The five year forecast for Scotland is for an 18.8% rise, slightly less than the price rises forecast at the beginning of 2015.

The prospective continuing rise in housing prices will narrow the gap between the real value of houses and the cash price which is still below the peak prices before the recession as adjusted for inflation. The Halifax index peaked at the £199,600 recorded in August 2007. The equivalent inflation-adjusted price in October 2015 would have been 25.33% higher, or £250,150, but the current October 2015 Halifax index price is £205,240 – a long way to go! If house prices rise at just over 4.0% and inflation is 2.0% then ten more years will elapse before the August 2007 peak is regained in real terms. House prices are difficult to predict and historically errors are large, especially around the timings of reversals or shocks. As I said last year: " ..... the key determinant of the long-term housing market will be a shortage in supply, resulting in high prices.".

The marginal supply of houses is relatively fixed, or inelastic, responding slowly to demand due to the long production cycle time which includes site acquisition, securing planning consents, so often delayed for years, and the actual construction. Thus any increase in demand will increase prices. The short-term demand for houses changes relatively quickly, or is elastic, being greatly influenced by mortgage costs and availability. Over the past year mortgage costs have continued to fall as interest rates continue unchanged but lending margins have declined slightly as competition between mortgage providers has increased. However, the criteria for lending, including the Mortgage Market Review and other controls being placed on lenders, has somewhat curtailed availability of credit especially on higher value properties. Demand in the first-time buyer market has been considerably assisted by the Help-to-Buy and other government schemes, operating primarily on lower – priced houses. I see no change in short-term demand until interest rates rise appreciably, a prospect that continues to recede in the UK and now seems unlikely to be substantially different until 2017 at the earliest.

The increase in short-term demand will be reinforced by an increase in the long-term demand for houses, due to a higher population and a smaller household size. The Office of National Statistics estimates that there will be a further 3.7m households by 2030, 13.6% more than at present. Over the next five years there will be 1.3m new households. For Scotland 92,281 (very exact!) new households are expected by 2020. Current house building levels in Great Britain are considerably lower than the expected increase in households, more so in Scotland than in any other area, where only 30,560 new house starts, or 33% of the projected household increase, are expected by 2020.

The increase in long-term demand over supply will increase prices unless supply is much increased, a change which over the next five years – a single production cycle – is most unlikely. In addition, increased incomes will also increase demand where time, convenience, amenity and quality and status of location all become more valued. The long-term prospects for the housing market are very good.

**Future Progress**

The Group has positioned itself to take advantage of a housing market which is stable and which I expect to improve over the next few years. We have successfully completed major investments in long planning processes and are initiating the further promotion of our largest proposal in the forthcoming Local Development Plan. Our emphasis is on the completion and realisation of development opportunities that have been postponed which can be marketed shortly whenever market conditions allow. We will seek to develop our major sites whenever practicable. As these sales progress other existing developments will be brought forward to provide replacements for these realisations.

While we require a stable and liquid market we do not depend on a significant recovery in prices for the successful development of most of our sites as almost all of these sites were purchased unconditionally, i.e. without planning permission, for prices not far above their existing use value, and before the 2007 house price peak. A major component of the Group land development value lies in the grant of planning permission, and in its extent, and it is relatively independent of changes in house values. For development or trading properties, unlike investment properties, no change is made to the Group's balance sheet even when improved development values have been obtained. Naturally, however, the balance sheet will reflect such enhanced value when the properties are developed or sold.

The policy of the Group will continue to be considered and conservative, but responsive to market conditions and opportunistic. The mid-market share price on 21 December 2015 was 130p, a discount to the NAV of

151.99p as at 30 June 2015. The Board does not recommend a final dividend, but intends to restore dividends when profitability and consideration for other opportunities and obligations permit.

**Conclusion**

The UK has emerged from the longest depression since 1873-96 and growth has recommenced but without the normal rebound. Policy interventions by Governments have alleviated the worst possible outcomes, especially for unemployment and social conditions, as the measures in the New Deal did for the US in the 1930s. In the UK the restrictive fiscal policies delayed a return to the pre-recession level and the long depression and credit controls have damaged the economy's long-term supply capability and reduced the output level significantly below the pre-recession trend. The opportunity to expand demand and to invest in capital projects during the depression at low interest cost has been lost and the UK economy's resulting poor productivity will not allow demand to be boosted without threatening inflation. As there has been no economic rebound from the depression, the UK is destined to operate for the foreseeable future at a lower rate of economic activity than could otherwise have been achievable.

The "Help-to-Buy" housing programmes continue to provide a major boost to the new house market and to the economy. However, the flow of credit to companies continues to be a major restriction on growth because of the requirement to increase the banks' capital bases which still suffer from penalties for inappropriate practices. The restoration of a competitive market in banking and credit to replace the long-established oligopoly, is highly desirable, and the establishment of a new range of banks and the emergence of crowd funding and of retail bonds are favourable trends. Perhaps it is for these and many other reasons that Mervyn King, the previous Governor, said: "Of all the banking systems, ours is the worst"!

The economic advantages the UK enjoys from controlling its monetary system and from an independent currency are being palpably demonstrated by the continuing unresolved underlying crisis in the Eurozone where political ambition battles economic reality and the practical challenges faced by impractical policies. The Eurozone may yet pay a big price for these political ambitions. The European ideal, particularly the creation of the Eurozone, was a triumph of hope and ideology over economic reality. That ideal will be tested in the referendum. The economic case for continued membership depends on the future strategy of the Eurozone members of which the UK is not part. The political achievement of the EZ continues to exact a heavy economic price being centralist, protectionist and economically conservative. The economic price that the UK would pay from leaving the EU is generally highly exaggerated, as the economic arguments are no more understood by most advocates of the EU than they were understood by the advocates of the Euro, an error from which they were fortunately saved. The net cost, if any, would depend on the arrangements made with the EU, a known unknown. The choice ultimately is political.

The large reduction in oil price and other commodities represents a huge boom to the UK economy, giving a much-needed boost to consumers but prices at current levels will accelerate the natural rundown of the Scottish oil industry, particularly in the North East. The effects, radiating throughout the Scottish economy, will be widespread and long lived. Scotland's oil has a future, as prices will recover somewhat modestly, and the much neglected shale deposits represent a new opportunity. The contraction of this extractive industry will undermine the extensive and highly-regarded supporting service industries, as closure of other Scottish industries has withdrawn their supporting industries. All commodity-based economies suffer from the volatility of commodity prices and an entrepreneurial innovative service-based society should be encouraged if economic growth and higher living standards are to be achieved. A larger cake will provide larger shares for all sections of society.

Unlike many other property companies, the Group has successfully negotiated the worst economic crisis for over a century. The prospects are very good provided economic and political stability continues, which I expect.

I D Lowe
Chairman
22 December 2015

**Consolidated income statement for the year ended 30 June 2015**

| | Note | **2015 £000** | 2014 £000 |
|---|---|---|---|
| **Revenue** | | | |
| Revenue from development property sales | | **440** | 513 |
| Gross rental income | | **304** | 332 |
| Service charge income | | **30** | 12 |
| Property charges | | **(224)** | (181) |
| **Net rental and related income** | | **550** | 676 |
| Cost of development property sales | | **(272)** | (480) |
| Administrative expenses | | **(726)** | (761) |
| Other income | | **28** | 53 |
| **Net operating loss before investment property disposals and valuation movements** | 5 | **(420)** | (512) |
| Valuation gains on investment properties | | **1,100** | 975 |
| Valuation losses on investment properties | | **-** | (195) |
| **Net valuation gains on investment properties** | | **1,100** | 780 |
| **Operating profit** | | **680** | 268 |
| Financial income | 7 | **1** | 1 |
| Financial expenses | 7 | **(116)** | (105) |
| **Net financing costs** | | **(115)** | (104) |
| **Profit before taxation** | | **565** | 164 |
| Income tax | 8 | **-** | - |
| **Profit for the financial period attributable to equity holders of the company** | | **565** | 164 |
| **Profit per share** | | | |
| Basic and diluted profit per share (pence) | 9 | **4.79p** | 1.39p |

The notes on pages 33 - 51 form part of these financial statements.

**Consolidated statement of comprehensive income for the year ended 30 June 2015**

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| Profit for the year attributable to the equity holders of the parent company | **565** | 164 |

**Consolidated balance sheet as at 30 June 2015**

| | Note | **2015 £000** | 2014 £000 |
|---|---|---|---|
| **Non current assets** | | | |
| Investment property | 10 | **10,515** | 9,415 |
| Property, plant and equipment | 11 | **24** | 35 |
| Investments | 12 | **1** | 1 |
| **Total non-current assets** | | **10,540** | 9,451 |
| **Current assets** | | | |
| Trading properties | 13 | **11,418** | 11,498 |
| Trade and other receivables | 14 | **96** | 67 |
| Cash and cash equivalents | 15 | **131** | 34 |
| **Total current assets** | | **11,645** | 11,599 |
| **Total assets** | | **22,185** | 21,050 |
| **Current liabilities** | | | |
| Trade and other payables | 16 | **(645)** | (525) |
| Interest bearing loans and borrowings | 17 | **(3,530)** | (3,180) |
| **Total current liabilities** | | **(4,175)** | (3,705) |
| **Non current liabilities** | | | |
| Interest bearing loans and borrowings | | **(100)** | - |
| **Total liabilities** | | **(4,275)** | (3,705) |
| **Net assets** | | **17,910** | 17,345 |
| **Equity** | | | |
| Issued share capital | 21 | **2,357** | 2,357 |
| Capital redemption reserve | 22 | **175** | 175 |
| Share premium account | 22 | **2,745** | 2,745 |
| Retained earnings | | **12,633** | 12,068 |
| **Total equity attributable to equity holders of the parent company** | | **17,910** | 17,345 |
| **NET ASSET VALUE PER SHARE** | | **151.99p** | 147.19p |

The financial statements were approved by the board of directors on 22 December 2015 and signed on its behalf by:

**ID Lowe**
Director
The notes on pages 33 - 51 form part of these financial statements.

**Consolidated statement of changes in equity as at 30 June 2015**

| | Share capital | Capital redemption reserve | Share premium account | Retained earnings | Total |
|---|---|---|---|---|---|
| | **£000** | **£000** | **£000** | **£000** | **£000** |
| At 1 July 2014 | 2,357 | 175 | 2,745 | 12,068 | **17,345** |
| Profit for the year | - | - | - | 565 | **565** |
| **At 30 June 2015** | **2,357** | **175** | **2,745** | **12,633** | **17,910** |
| At 1 July 2013 | 2,357 | 175 | 2,745 | 11,904 | 17,181 |
| Profit for the year | - | - | - | 164 | 164 |
| At 30 June 2014 | 2,357 | 175 | 2,745 | 12,068 | 17,345 |

## Consolidated cash flow statement for the year ended 30 June 2015

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| **Cash flows from operating activities** | | |
| **Profit for the year** | **565** | 164 |
| Adjustments for : | | |
| Gains on fair value adjustment of investment property | **(1,100)** | (780) |
| Depreciation | **14** | 13 |
| Net finance expense | **116** | 104 |
| **Operating cash flows before movements in working capital** | **(405)** | (499) |
| Decrease in trading properties | **80** | 273 |
| (Increase)/decrease in trade and other receivables | **(29)** | 108 |
| Increase /(decrease) in trade and other payables | **3** | (10) |
| **Cash absorbed by the operations** | **(351)** | (128) |
| Interest received | **1** | 1 |
| **Net cash outflow from operating activities** | **(350)** | (127) |
| **Investing activities** | | |
| Investment in the year | **-** | (1) |
| Acquisition of property, plant and equipment | **(3)** | (24) |
| **Cash flows from investing activities** | **(3)** | (25) |
| **Financing activities** | | |
| Increase in borrowings | **450** | 180 |
| **Cash flows from financing activities** | **450** | 180 |
| **Net increase in cash and cash equivalents** | **97** | 28 |
| Cash and cash equivalents at beginning of year | **34** | 6 |
| **Cash and cash equivalents at end of year** | **131** | 34 |

## 1 Reporting entity

Caledonian Trust PLC is a company domiciled in the United Kingdom. The consolidated financial statements of the company for the year ended 30 June 2015 comprise the company and its subsidiaries as listed in note 5 in the parent company's financial statements (together referred to as "the Group"). The Group's principal activities are the holding of property for both investment and development purposes.

## 2 Statement of Compliance

The group financial statements have been prepared and approved by the directors in accordance with International Financial Reporting Standards and its interpretation as adopted by the EU ("Adopted IFRSs"). The Company has elected to prepare its parent company financial statements in accordance with UK GAAP; these are presented on pages 52 to 59.

## 3 Basis of preparation

The financial statements are prepared on the historical cost basis except for available for sale financial assets and investment properties which are measured at their fair value.

The preparation of the financial statements in conformity with Adopted IFRSs requires the directors to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

These financial statements have been presented in pounds sterling which is the functional currency of all companies within the Group. All financial information has been rounded to the nearest pounds thousand.

*Going concern*

The group's business activities, together with the factors likely to affect its future development, performance and position are set out in the Chairman's Statement on pages 2 to 21. The financial position of the group, its cash flows, liquidity position and borrowing facilities are described in Note 18.

In addition, note 18 to the financial statements includes the group's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposures to credit risk and liquidity risk.

The group and company finance their day to day working capital requirements through related party loans (see note 17).

The Directors have prepared projected cash flow information for the period ending twelve months from the date of their approval of these financial statements. These forecasts assume the group will make property sales in the normal course of business to provide sufficient cash inflows to allow the group to continue to trade.

Should these sales not complete as planned, the directors are confident that they would be able to sell sufficient other properties within a short timescale to generate the income necessary to meet the group's liabilities as they fall due.

For these reasons they continue to adopt the going concern basis in preparing the financial statements.

**Areas of estimation uncertainty and critical judgements**

Information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant effect on the amount recognised in the financial statements is contained in the following notes:

- *Valuation of investment properties (note 10)*
  The valuation of properties is subjective and based on similar transactions in the market, rental yields and development potential. The company's directors are experienced in dealing with such properties. Director's valuations at the balance sheet date are based on independent external valuations as at 30 June 2013. The Executive Directors have respectively over 40 years and 30 years of experience in commercial property. RJ Pearson is a Fellow of the Royal Institution of Chartered Surveyors and has practised as a surveyor in Scotland for 37 years during which time he has specialised in commercial property.

- *Valuation of trading properties (note 13)*
  Trading properties are carried at the lower of cost and net realisable value. The net realisable value of such properties is based on the amount the company is likely to achieve in a sale to a third party. This is then dependent on availability of planning consent and demand for sites which is influenced by the housing and property markets.

## 4 Accounting policies

The accounting policies below have been applied consistently to all periods presented in these consolidated financial statements.

**Basis of consolidation**
The financial statements incorporate the financial statements of the company and all its subsidiaries. Subsidiaries are entities controlled by the group. Control exists when the group has the power to determine the financial and operating policies of an entity so as to obtain benefits from its activities. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date it ceases.

**Revenue**
Rental income from properties leased out under operating leases is recognised in the income statement on a straight line basis over the term of the lease. Costs of obtaining a lease and lease incentives granted are recognised as an integral part of total rental income and spread over the period from commencement of the lease to the earliest termination date on a straight line basis.

Revenue from the sale of trading properties is recognised in the income statement on the date at which the significant risks and rewards of ownership are transferred to the buyer with proceeds and costs shown on a gross basis.

**Other income**
Other income comprises income from agricultural land and other miscellaneous income.

**Finance income and expenses**
Finance income and expenses comprise interest payable on bank loans and other borrowings. All borrowing costs are recognised in the income statement using the effective interest rate method. Interest income represents income on bank deposits using the effective interest rate method.

**Taxation**
Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised

directly in equity, in which case the charge / credit is recognised in equity. Current tax is the expected tax payable on taxable income for the current year, using tax rates enacted or substantively enacted at the reporting date, adjusted for prior years under and over provisions.
Deferred tax is provided using the balance sheet liability method in respect of all temporary differences between the values at which assets and liabilities are recorded in the financial statements and their cost base for taxation purposes. Deferred tax includes current tax losses which can be offset against future capital gains. As the carrying value of the group's investment properties is expected to be recovered through eventual sale rather than rentals, the tax base is calculated as the cost of the asset plus indexation. Indexation is taken into account to reduce any liability but does not create a deferred tax asset. A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised.

**Investment properties**
Investment properties are properties owned by the group which are held either for long term rental growth or for capital appreciation or both. Properties transferred from trading properties to investment properties are revalued to fair value at the date on which the properties are transferred. When the Group begins to redevelop an existing investment property for continued future use as investment property, the property remains an investment property, which is measured based on the fair value model, and is not reclassified as property, plant and equipment during the redevelopment.

The cost of investment property includes the initial purchase price plus associated professional fees. Borrowing costs directly attributable to the acquisition or construction of qualifying assets are capitalised during the period of construction. Subsequent expenditure on investment properties is only capitalised to the extent that future economic benefits will be realised.

Investment property is measured at fair value at each balance sheet date. External independent professional valuations are prepared at least once every three years. The fair values are based on market values, being the estimated amount for which a property could be exchanged on the date of valuation between a willing buyer and a willing seller in an arms-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.

Any gain or loss arising from a change in fair value is recognised in the income statement.

**Purchases and sales of investment properties**
Purchases and sales of investment properties are recognised in the financial statements at completion which is the date at which the significant risks and rewards of ownership are transferred to the buyer.

**Property, plant and equipment**
Property, plant and equipment are stated at cost, less accumulated depreciation and any provision for impairment. Depreciation is provided on all property, plant and equipment at varying rates calculated to write off cost to the expected current residual value by equal annual instalments over their estimated useful economic lives. The principal rates employed are:

| | | |
|---|---|---|
| Plant and equipment | - | 20.0 per cent |
| Fixtures and fittings | - | 33.3 per cent |
| Motor vehicles | - | 33.3 per cent |

**Trading properties**
Trading properties held for short term sale or with a view to subsequent disposal in the near future are stated at the lower of cost or net realisable value. Cost is calculated by reference to invoice price plus directly attributable professional fees. Net realisable value is based on estimated selling price less estimated cost of disposal.

**Financial assets**

***Trade and other receivables***
Trade and other receivables are initially recognised at fair value and then stated at amortised cost.

**Financial instruments**

***Available for sale financial assets***
The group's investments in equity securities are classified as available for sale financial assets. They are initially recognised at fair value plus any directly attributable transaction costs. Subsequent to initial recognition they are measured at fair value and changes therein, other than Impairment losses, are recognised directly in equity. The fair value of available for sale investments is their quoted bid price at the balance sheet date. When an investment is disposed of, the cumulative gain or loss in equity is recognised in profit or loss. Dividend income is recognised when the company has the right to receive dividends either when the share becomes ex dividend or the dividend has received shareholder approval.

***Cash and cash equivalents***

Cash includes cash in hand, deposits held at call (or with a maturity of less than 3 months) with banks, and bank overdrafts. Bank overdrafts that are repayable on demand and which form an integral part of the Group's cash management are shown within current liabilities on the balance sheet and included with cash and cash equivalents for the purpose of the statement of cash flows.

**Financial liabilities**

***Trade payables***

Trade payables are non-interest-bearing and are initially measured at fair value and thereafter at amortised cost.

***Interest bearing loans and borrowings***

Interest-bearing loans and bank overdrafts are initially carried at fair value less allowable transactions costs and then at amortised cost.

**New Standards and interpretations not yet adopted**

The International Accounting Standards Board (IASB) and International Financial Reporting Interpretations Committee has recently issued the following new standards and amendments which are effective for annual periods beginning on or after 1 January 2015, unless stated otherwise, and have not been applied in preparing these consolidated financial statements.

- *IFRS 9 Financial Instruments: Classification and Measurement* which is the first phase of a wider project to replace IAS 39.

  *Financial Instruments: Recognition and Measurement,* replaces the current models for classification measurement of financial instruments. Financial assets are to be classified into two measurement categories: fair value and amortised cost. Classification will depend on an entity's business model and the characteristics of contractual cash flow of the financial instrument. The standard is effective for annual periods beginning on or after 1 January 2018.

  As at the time of publication of these financial statements, the IASB is re-deliberating the requirements for classification and measurement in IFRS 9 while the requirements of latter phases of IFRS 9 are in development and therefore remain uncertain.

**Operating segments**

The Group determines and presents operating segments based on the information that is internally provided to the Board of Directors ("The Board"), which is the Group's chief operating decision maker. The directors review information in relation to the Group's entire property portfolio, regardless of its type or location, and as such are of the opinion that there is only one reportable segment which is represented by the consolidated position presented in the primary statements.

## 5 Operating profit

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| The operating profit is stated after charging : | | |
| Depreciation | **14** | 13 |
| Amounts received by auditors and their associates in respect of: | | |
| - Audit of these financial statements (Group and Company) | **7** | 9 |
| - Audit of financial statements of subsidiaries pursuant to legislation | **6** | 6 |
| | ====== | ====== |

## 6 Employees and employee benefits

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| Employee remuneration | | |
| Wages and salaries | **412** | 371 |
| Social security costs | **43** | 41 |
| Other pension costs | **31** | 32 |
| | **486** | 444 |
| | ====== | ======= |

Other pension costs represent contributions to defined contribution plans.

The average number of employees during the year was as follows:

| | **No.** | No. |
|---|---|---|
| Management | **2** | 2 |
| Administration | **3** | 2 |
| Other | **4** | 2 |
| | **9** | 6 |
| | ====== | ======= |

| | **2015** | 2014 |
|---|---|---|
| *Remuneration of directors* | **£000** | £000 |
| Directors' emoluments | **251** | 250 |
| Company contributions to money purchase pension schemes | **26** | 25 |
| | ====== | ====== |

| Director | Salary and Fees £000 | Benefits £000 | Pension Contributions £000 | **2015 Total £000** | 2014 Total £000 |
|---|---|---|---|---|---|
| ID Lowe | 110 | 5 | - | **115** | 115 |
| MJ Baynham | 125 | 2 | 26 | **153** | 152 |

| | | | | | |
|---|---|---|---|---|---|
| RJ Pearson | 9 | - | - | **9** | 8 |
| | **244** | **7** | **26** | **277** | 275 |

## 7 Finance income and finance expenses

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| **Finance income** | | |
| Interest receivable: | | |
| - on bank balances | **1** | 1 |
| **Finance expenses** | | |
| Interest payable: | | |
| - Other loan interest | **21** | 10 |
| - Loan stock repayable within five years | **95** | 95 |
| | **116** | 105 |

## 8 Income tax

There was no tax charge/(credit) in the current or preceding year.

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| Profit before tax | **565** | 164 |
| Current tax at 20.75 % *(2014 : 22.5%)* | **117** | 37 |
| *Effects of:* | | |
| Expenses not deductible for tax purposes | **20** | 8 |
| Losses carried forward | **91** | 131 |
| Revaluation of property not taxable | **(228)** | (176) |
| Total tax charge | **-** | **-** |

In the case of deferred tax in relation to investment property revaluation surpluses, the base cost used is historical book cost and includes allowances or deductions which may be available to reduce the actual tax liability which would crystallise in the event of a disposal of the asset.

Reductions in the UK corporation tax rate from 23% to 21% (effective from 1 April 2014) and 20% (effective from 1 April 2015) were substantively enacted on 2 July 2013. Further reductions to 19% (effective from 1 April 2017) and to 18% (effective 1 April 2020) were substantively enacted on 26 October 2015. This will reduce the company's future current tax charge accordingly.

## 9 Profit per share

Basic profit per share is calculated by dividing the profit attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period as follows:

| **2015** | 2014 |
|---|---|

| | £000 | £000 |
|---|---|---|
| Profit for financial period | **565** | 164 |
| | ====== | ====== |
| | **No.** | No. |
| Weighted average no. of shares: for basic earnings per share and for diluted earnings per share | **11,783,577** | 11,783,577 |
| | ======== | ======== |
| Basic profit per share | **4.79p** | 1.39 p |
| Diluted profit per share | **4.79p** | 1.39p |

The diluted figure per share is the same as the basic figure per share as there are no dilutive shares.

## 10 Investment properties

| | 2015 | 2014 |
|---|---|---|
| | £000 | £000 |
| **Valuation** | | |
| At 30 June 2014 | **9,415** | **8,635** |
| Revaluation in year | **1,100** | **780** |
| **Valuation at 30 June 2015** | **10,515** | **9,415** |
| | ======== | ======== |

The carrying amount of investment property is the fair value at the balance sheet date as calculated by the directors, based on external independent valuations at open market value made by Montagu Evans and Rettie & Co, independent property consultants, at 30 June 2013. The properties have been valued individually in accordance with the definition of market value and good practice guidelines set out in the 6th Edition of the Royal Institution of Chartered Surveyors valuation and appraisal manual. In this regard, market value is defined as "the estimated amount for which a property should exchange between a willing buyer and willing seller in an arm's length transaction after proper marketing wherein the parties had acted knowledgeably, prudently and without compulsion".

The significant investment properties have development potential and the valuation of such properties is inherently subjective. However the company's directors are experienced in dealing with such properties. The Executive Directors have respectively over 40 years and 30 years of experience in commercial property. Additionally RJ Pearson is a Fellow of the Royal Institution of Chartered Surveyors and has practised as a surveyor in Scotland for 37 years during which time he has specialised in commercial property.

The 'review of activities' within the Chairman's statement provides the current status of each property together with an analysis of the 'property prospects' for 2016 and beyond.

The cumulative amount of interest capitalised in respect of the group's investment properties is £476,000 (2014: £476,000).

## 11 Property, plant and equipment

| Motor | Fixtures and | Other |
|---|---|---|

| | Vehicles £000 | fittings £000 | equipment £000 | Total £000 |
|---|---|---|---|---|
| **Cost** | | | | |
| At 30 June 2014 | 18 | 14 | 62 | 94 |
| Additions in year | - | - | 3 | 3 |
| **At 30 June 2015** | **18** | **14** | **65** | **97** |
| **Depreciation** | | | | |
| At 30 June 2014 | 11 | 9 | 39 | 59 |
| Charge for year | 2 | 4 | 8 | 14 |
| **At 30 June 2015** | **13** | **13** | **47** | **73** |
| **Net book value** | | | | |
| **At 30 June 2015** | **5** | **1** | **18** | **24** |
| At 30 June 2014 | 7 | 5 | 23 | 35 |

## 12 Investments

| | **2015 £000** | 2014 £000 |
|---|---|---|
| *Available for sale investments* | | |
| At the start of the year | **1** | - |
| Purchased in year | **-** | 1 |
| Available for sale financial assets | **1** | 1 |
| | ====== | ====== |

## 13 Trading properties

| | **2015 £000** | 2014 £000 |
|---|---|---|
| At start of year | **11,498** | 11,771 |
| Additions | **190** | 207 |
| Sold in year | **(270)** | (480) |
| At end of year | **11,418** | 11,498 |
| | ======== | ======== |

## 14 Trade and other receivables

| | **2015 £000** | 2014 £000 |
|---|---|---|
| *Amounts falling due within one year* | | |
| Other debtors | **68** | 25 |
| Prepayments and accrued income | **28** | 42 |
| | **96** | 67 |
| | ====== | ====== |

The company's exposure to credit risks and impairment losses relating to trade receivables is given in note 18.

## 15 Cash and cash equivalents

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| Cash | **131** | 34 |
| | ====== | ====== |

Cash and cash equivalents comprise cash at bank and in hand. Cash deposits are held with UK banks. The carrying amount of cash equivalents approximates to their fair values. The company's exposure to credit risk on cash and cash equivalents is regularly monitored (note 18).

## 16 Trade and other payables

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| Accruals and other creditors | **645** | 525 |
| | ====== | ====== |

The Group's exposure to currency and liquidity risk relating to trade payables is disclosed in note 18.

## 17 Other interest bearing loans and borrowings

The Group's interest bearing loans and borrowings are measured at amortised cost. More information about the Group's exposure to interest rate risk and liquidity risk is given in note 18.

*Current liabilities*

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| Floating rate unsecured Loan Notes | **2,725** | 2,725 |
| Unsecured loan | **805** | 455 |
| | **3,530** | 3,180 |
| | ======= | ======== |
| *Non current liabilities* | | |
| Unsecured loan | **100** | - |
| | ======= | ======= |

*Terms and debt repayment schedule*

Terms and conditions of outstanding loans and loan stock were as follows:

| | Currency | Nominal interest rate | **2015 Fair value £000** | **2015 Carrying amount £000** | 2014 Fair value £000 | 2014 Carrying amount £000 |
|---|---|---|---|---|---|---|
| Unsecured loan | GBP | Base +3% | **805** | **805** | 455 | 455 |
| Floating rate unsecured loan stock | GBP | Base + 3% | **2,725** | **2,725** | 2,725 | 2,725 |
| Unsecured loan | GBP | Base + 3% | **100** | **100** | - | - |
| | | | **3,630** | **3,630** | 3,180 | 3,180 |

## 18 Financial instruments

### Fair values

*Fair values versus carrying amounts*

The fair values of financial assets and liabilities, together with the carrying amounts shown in the balance sheet, are as follows:

| | **2015** | | 2014 | |
|---|---|---|---|---|
| | **Fair value** | **Carrying amount** | Fair value | Carrying amount |
| | **£000** | **£000** | £000 | £000 |
| Trade and other receivables | **96** | **96** | 67 | 67 |
| Cash and cash equivalents | **131** | **131** | 34 | 34 |
| | **227** | **227** | 101 | 101 |
| Loans from related parties | **3,630** | **3,630** | 3,180 | 3,180 |
| Trade and other payables | **645** | **645** | 525 | 525 |
| | **4,275** | **4,275** | 3,705 | 3,705 |

***Estimation of fair values***

The following methods and assumptions were used to estimate the fair values shown above:

***Available for sale financial assets –*** as such assets are listed, the fair value is determined at the market price.

***Trade and other receivables/payables*** – the fair value of receivables and payables with a remaining life of less than one year is deemed to be the same as the book value.

***Cash and cash equivalents*** – the fair value is deemed to be the same as the carrying amount due to the short maturity of these instruments.

***Other loans*** – the fair value is calculated by discounting the expected future cashflows at prevailing interest rates.

### Overview of risks from its use of financial instruments

The Group has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- market risk

The Board of Directors has overall responsibility for the establishment and oversight of the company's risk management framework and oversees compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group.

The Board's policy is to maintain a strong capital base so as to cover all liabilities and to maintain the business and to sustain its development.

The Board of Directors also monitors the level of dividends to ordinary shareholders.

There were no changes in the Group's approach to capital management during the year.

Neither the company nor any of its subsidiaries are subject to externally imposed capital requirements.

The group's principal financial instruments comprise cash and short term deposits. The main purpose of these financial instruments is to finance the group's operations.

As the group operates wholly within the United Kingdom, there is currently no exposure to currency risk.

The main risks arising from the group's financial instruments are interest rate risks and liquidity risks. The board reviews and agrees policies for managing each of these risks, which are summarised below

**Credit risk**

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Group's receivables from customers, cash held at banks and its available for sale financial assets.

*Trade receivables*

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each tenant. The majority of rental payments are received quarterly in advance which reduces the group's exposure to credit risk on trade receivables.

*Other receivables*

Other receivables consist of amounts due from a company in which the group holds a minority investment.

*Available for sale financial assets*

The Group does not actively trade in available for sale financial assets.

*Bank facilities*

At the year end the company had no loan facilities available *(2014: Nil).*

*Exposure to credit risk*

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was:

| | **Carrying value** | |
|---|---|---|
| | **2015** | 2014 |
| | **£000** | £000 |
| Available for sale investments | **1** | 1 |
| Other receivables | **68** | 25 |
| Cash and cash equivalents | **131** | 34 |
| | **200** | 60 |

The company does not have an allowance for impairment on trade receivables as, based on historical experience, management does not consider that such an impairment is required.

Credit risk for trade receivables at the reporting date was all in relation to property tenants in United Kingdom.

The company's exposure is spread across a number of customers.

**Liquidity risk**

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due without incurring unacceptable losses or risking damage to the Company's reputation. Whilst the directors cannot envisage all possible circumstances, the directors believe that, taking account of reasonably foreseeable adverse movements in rental income, interest or property values, the group has sufficient resources available to enable it to do so.

The group's exposure to liquidity risk is given below

| **30 June 2015 £'000** | **Carrying amount** | **Contractual cash flows** | **6 months or less** | **6-12 months** | **2-5 years** |
|---|---|---|---|---|---|
| Floating rate unsecured loan stock | 2,725 | 2,774 | 48 | 2,726 | - |
| Unsecured loan | 805 | 817 | 12 | 805 | - |
| Unsecured loan | 100 | 107 | 2 | 2 | 103 |
| Trade and other payables | 645 | 645 | 645 | - | - |

| **30 June 2014 £'000** | **Carrying amount** | **Contractual cash flows** | **6 months or less** | **6-12 months** | **2-5 years** |
|---|---|---|---|---|---|
| Floating rate unsecured loan stock | 2,725 | 2,774 | 48 | 2,726 | - |
| Unsecured loan | 455 | 463 | 8 | 455 | - |
| Trade and other payables | 525 | 525 | 525 | - | - |

**Market risk**

Market risk is the risk that changes in market prices, such as interest rates, will affect the company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

*Interest rate risk*

The Group borrowings are at floating rates of interest based on LIBOR or Base Rate.

The interest rate profile of the Group's borrowings as at the year end was as follows:

| | **2015 £000** | 2014 £000 |
|---|---|---|
| Unsecured loan | **805** | 455 |
| Unsecured loan | **100** | - |
| Floating rate instruments – financial liabilities | **2,725** | 2,725 |
| | **=======** | ======= |

The weighted average interest rate of the floating rate borrowings was 3.5% *(2014: 3.5%).*

A 1% movement in interest rates would be expected to change the Group's annual net interest charge by £36,300 *(2014: £32,000)*.

## 19 Operating leases

*Leases as lessors*

The group leases out its investment properties under operating leases. The future minimum receipts under non-cancellable operating leases are as follows:

| | **2015** | 2014 |
|---|---|---|
| | **£000** | £000 |
| Less than one year | **146** | **125** |
| Between one and five years | **310** | **360** |
| Greater than five years | **284** | **311** |
| | **740** | **796** |

The amounts recognised in income and costs for operating leases are shown on the face of the income statement.

## 20 Income tax and deferred tax

At 30 June 2015, the group has a potential deferred tax asset of £971,000 (*2014: £*1,162,000) of which £153,000 (*2014: £321,000*) relates to differences between the carrying value of investment properties and the tax base. In addition the group has tax losses which would result in a deferred tax asset of £818,000 (*2014: £841,000*). This has not been recognised due to the uncertainty over the availability of future taxable profits.

**Movement in unrecognised deferred tax asset**

| | Balance 1 July 13 at 23% | Additions/ reductions | Balance 30 June 14 at 20% | Additions/ reductions | **Balance 30 Jun 15 at 18%** |
|---|---|---|---|---|---|
| | £000 | £000 | £000 | £000 | **£000** |
| Investment properties | 412 | (91) | 321 | (168) | **153** |
| Tax losses | 787 | 54 | 841 | (23) | **818** |
| Total | 1,199 | (37) | 1,162 | (191) | **971** |

## 21 Issued share capital

| | **30 June 2015** | | 30 June 2014 | |
|---|---|---|---|---|
| | **No** | **£000** | No. | £000 |
| **Issued and fully paid** | | | | |
| Ordinary shares of 20p each | **11,783,577** | **2,357** | 11,783,577 | 2,357 |

Holders of ordinary shares are entitled to dividends declared from time to time, to one vote per ordinary share and a share of any distribution of the company's assets.

## 22 Capital and reserves

The capital redemption reserve arose in prior years on redemption of share capital. The reserve is not distributable.

The share premium account is used to record the issue of share capital above par value. This reserve is not distributable.

## 23 Related parties

*Transactions with key management personnel*

Transactions with key management personnel consist of compensation for services provided to the company. Details of this are given in note 6.

*Other related party transactions*

The parent company has a related party relationship with its subsidiaries. The group and company has unsecured floating rate loan stock due to Leafrealm Limited, a company of which ID Lowe is the controlling shareholder. This is on normal commercial terms. Leafrealm charged £95,000 *(2014: £95,000)* of interest in respect of its holding of Floating Rate Unsecured Loan Stock. The balance due to this party at the year-end was £3,530,000 (*2014: £3,180,000*).

The group and company has an unsecured loan from Mrs V Baynham, the wife of a director. This is on normal commercial terms. The balance due to this party at 30 June 2015 was £99,999 (*2014: nil*) with interest payable at 3% over Bank of Scotland base rate per annum. The loan is due to be repaid on 1 July 2017.