



Our performance

Structural pressures in some markets together with cyclical and transitional issues have led to a challenging operating environment for Pearson. To remain focused on the biggest opportunities in global education, whilst dealing with challenging markets, we have made significant portfolio and management changes, undertaken a major restructuring which has exceeded its cost savings objectives, embarked on a broad-based simplification programme and continued to invest more than £700m per year in our portfolio of products and services.

We have been investing steadily to develop new digital products and services, and forge broader partnerships with academic institutions, that enable us to capitalise on our scale and harness the opportunities in global education.

In this section

30	Financial review	44	Risk management
36	Key performance indicators	47	Principal risks & uncertainties
38	Operating performance		
38	North America		
40	Core		
42	Growth		
43	Penguin Random House		



Financial review ^P

“In 2016, Pearson’s sales increased by £84m in headline terms to £4.6bn. Total continuing adjusted operating profit fell £37m to £635m.”



Coram Williams
Chief financial officer

Profit and loss statement

In 2016, Pearson’s sales increased by £84m in headline terms to £4.6bn. Total continuing adjusted operating profit fell £37m to £635m (2015: £672m).

Currency movements, primarily from the depreciation of sterling against the US dollar during the period, increased sales by £486m and operating profits by £106m.

At constant exchange rates (i.e., stripping out the impact of those currency movements), our sales fell by 9% primarily due to weakness in US higher education courseware, US K-12 assessment and courseware and UK student assessment; and continuing adjusted operating profit fell by 21% due to lower revenues.

The effect of disposals reduced sales by £63m and continuing adjusted operating profits by £2m.

Stripping out the impact of portfolio changes and currency movements, revenues were down 8% in underlying terms while adjusted operating profit fell 21%.

Net interest payable in 2016 was £59m, compared with £46m in 2015. Interest rose due to the weakness of sterling against largely dollar denominated debt and lower released accrued interest payments following agreement on historical tax positions.

Our adjusted tax rate in 2016 was 16.5% (2015: 15.5%). The increase in tax rate was primarily due to a smaller benefit from adjustments arising from the agreement of historical tax positions, partially offset by a larger proportion of total adjusted profits coming from joint ventures and associates, from which tax has already been deducted.

Adjusted earnings per share were 58.8p (2015: 70.3p).

Cash generation

Headline operating cash flow increased by £228m to £663m and operating cash conversion rose to 104% from 60% due to lower cash incentive payments and tight working capital control.

Return on invested capital

Our return on average invested capital was 5.0% (2015: 5.8%) primarily due to lower adjusted operating profit.

Statutory results

Our statutory results showed a loss for the year after tax of £2,335m, including an impairment of goodwill of £2,548m, reflecting trading pressures in our North American businesses.

Financial summary

Business performance

£ millions	2016	2015	Headline growth	CER growth	Underlying growth
Sales	4,552	4,468	2%	(9)%	(8)%
Adjusted operating profit – continuing operations	635	672	(6)%	(21)%	(21)%
Adjusted operating profit	635	723	(12)%	(27)%	(21)%
Adjusted earnings per share	58.8p	70.3p	(16)%		
Operating cash flow	663	435	52%		
Net debt	(1,092)	(654)	(67)%		

Growth rates are stated on a constant exchange rate (CER) basis unless otherwise stated. Where quoted, underlying growth rates exclude both currency movements and portfolio changes. Unless otherwise stated, in 2015 sales exclude FT Group, while total adjusted operating profits include FT Group. Continuing operations exclude FT Group.

Statutory results

£ millions	2016	2015	Headline growth
Sales	4,552	4,468	2%
Operating (loss)/profit	(2,497)	(404)	
Loss before tax	(2,557)	(433)	
(Loss)/profit for the year	(2,335)	823	
Basic (loss)/earnings per share	(286.8)p	101.2p	
Cash generated from operations	522	518	1%
Dividend per share	52p	52p	0%

The business performance measures are non-GAAP measures and are included as they are key financial measures used by management to evaluate performance and also for investors to track the underlying operational performance of the Group. Reconciliations to the equivalent statutory heading under IFRS are included in the corporate and operating measures on p194-195.

Balance sheet

Our net debt increased to £1,092m (2015: £654m) reflecting the strengthening of the US dollar relative to sterling and restructuring costs. Pearson's net debt/ EBITDA ratio remains solid at 1.4x (2015: 0.8x).

Dividend

The board is proposing a final dividend of 34p, which results in an overall 2016 dividend of 52p, flat on 2015, subject to shareholder approval.

2017 outlook

In 2017, we expect to report adjusted operating profit of between £570m and £630m. This reflects the impact of the in-year benefits from the 2016 restructuring offset by ongoing challenging conditions in US higher education courseware, the costs of the employee incentive pool, other operational factors (including dual running costs as we rationalise our technology infrastructure, cost inflation and increased investment relating to new product launches) and the impact of some small disposals of sub-scale businesses.

We expect adjusted earnings per share to be between 48.5p and 55.5p, after an interest charge of £74m and a tax rate of approximately 20%. This guidance is based on our current portfolio of businesses and exchange rates on 31 December 2016.

The major factors behind this guidance are as follows:

Trading conditions

In **North America**, our largest market, our guidance for 2017 is based on assumptions of further declines in enrolment and other pressures in the **US higher education courseware market**. The top of the range implies that this is offset as the impact of the 2016 inventory correction at key channel partners partially unwinds, with lower returns resulting in net revenue growth in our US higher education courseware business of approximately 1%. The bottom of our guidance range assumes that inventory levels continue to fall resulting in a 7% net revenue decline. In both cases, we assume an underlying decline in demand of between 6% and 7% for US higher education courseware.

Elsewhere in North America, we anticipate modest declines in school courseware revenues reflecting a slightly larger adoption market offset by our lower participation rate due to our earlier decision not to compete in the current California English Language Arts (ELA) adoption; and flat revenues in Open Territories reflecting a smaller impact from new products after a very successful 2016. We expect some continued pressure on testing revenues in North America due to the annualisation of contract losses announced in 2015 and the roll-off of temporary contracts won in 2016, together with a further shift to digital tests which reduces revenue but benefits margins. We expect Connections Education to see double-digit growth in enrolment partially offset by some virtual school partners choosing to take some non-core services in-house. We expect online programme management and professional certification to continue to grow well.

In our **Core** markets (which include the UK, Italy and Australia), we anticipate: flat revenues with continued growth in Pearson Test of English Academic and in online programme management due to programme additions and new customer

Key performance indicators ^P

Maintain long-term growth

See a summary of all our KPIs on p36-37 →

Sales, £m, headline

£4,552m +2%

Year	Sales (£m)
2016	4,552
2015	4,468
2014	4,540
2013	4,728
2012	4,615

Sales grew in headline terms but fell 9% at CER in 2016 reflecting the declines in print in US higher education courseware and School Assessment in the UK and US. Over the last five years sales have grown at an average annual rate of 0.7% reflecting long term growth in digital and services and strength in the dollar relative to sterling, partially offset by pressure on print revenues, recent cyclical and policy factors and adverse FX movements in emerging markets.

Total adjusted operating profit, £m, headline

£635m -12%

Year	Profit (£m)
2016	635
2015	723
2014	722
2013	736
2012	932

Total adjusted operating profit fell 12% in headline terms and has fallen at a compound annual rate of 7.5% since 2011 reflecting pressure on revenues in higher margin businesses, portfolio changes and increased investment in digital and services, partially offset by growth in digital and services and the benefits of restructuring.

Financial review

wins; growth in UK school and higher education courseware due to a strong slate of new products aligned with Pearson qualifications; offset by modest declines in UK student assessment, where revenue is expected to lag behind the greater stability that we are now seeing in vocational course registrations; together with business exits and weakness in smaller markets.

In our **Growth** markets (which include Brazil, China, India and South Africa), we expect a modest increase in revenues; with growth in China driven by new product offerings and centre openings at Wall Street English; in South Africa due to improving enrolments in CTI, our private university; and in Brazil on evidence of greater economic stability. We expect courseware businesses across Growth to grow well on new product launches, offsetting some business exits as we focus on fewer, larger opportunities.

In **Penguin Random House**, we anticipate a broadly level publishing performance.

Portfolio changes

We completed the sale of a number of small subscale businesses which, combined, have the effect of reducing 2017 adjusted operating profit by £10m.

Other operational factors

Incentive compensation

Group incentive compensation increased by £55m in 2016, lower than the budgeted £110m reflecting the weakness of performance versus budget. The incentive pool will be budgeted in full in 2017 to ensure our workforce is properly incentivised.

Currency movements

In 2016, Pearson generated approximately 62% of its sales in the US, 7% in Greater China, 5% in the euro zone, 3% in Brazil, 3% in Canada, 2% in Australia, 2% in South Africa and 1% in India, and our guidance is based on exchange rates at 31 December 2016.

Debt repayment

To ensure efficient use of the cash balances we held at 31 December 2016, we announced that we will trigger the early repayment option on our \$550m 6.25% Global dollar bonds 2018.

Interest and tax

We expect our **interest charge** to be £74m (2016: £59m) due to currency movements and increases in US dollar LIBOR.

We expect an adjusted **tax rate** of approximately 20% on our total adjusted profit (which includes the post-tax contribution from Penguin Random House).

Other financial information

Net finance costs

£ millions	2016	2015
Net interest payable	(59)	(46)
Finance income in respect of employee benefit plans	11	4
Other net finance (costs)/income	(12)	13
Net finance costs	(60)	(29)

Net interest payable in 2016 was £59m, compared to £46m in 2015. The majority of the movement in net interest payable was due to a one-off release of accrued interest in 2015 following agreement of historical tax positions. The most significant element of the net interest payable figure is interest on bond debt with the impact of interest on tax provisions and interest receivable offsetting each other. Interest on bond debt was in line with the prior year, with the savings from bond repayments offset by the impact of rising US dollar interest rates.

Key performance indicators ^P

Deliver sustainable returns

See a summary of all our KPIs on p36-37 →

Total adjusted earnings per share, £m, headline

58.8p -16%

2016	58.8
2015	70.3
2014	66.7
2013	70.1
2012	82.6

Total adjusted earnings per share (EPS) is down 16% year on year in 2016 reflecting lower profitability, exchange rate movements and a slightly higher tax rate than 2015. Over five years, EPS has declined at an average annual rate of 7.3% reflecting pressure on revenues in higher margin businesses, increased investment in digital and services and portfolio changes, partially offset by growth in digital and services.

Return on invested capital, %, headline

5.0% -0.8 percentage points

2016	5.0%
2015	5.8%
2014	5.6%
2013	5.4%
2012	9.1%

Return on invested capital (ROIC) fell 0.8 percentage points to 5.0% in 2016 reflecting lower operating profit.

The increase in finance income in respect of employee benefit plans is a reflection of the more favourable funding position at the end of 2015. Both the loss in 2016 and the gain in 2015 in other net finance costs mainly relate to foreign exchange differences on unhedged cash and cash equivalents and other financial instruments.

Capital risk

The Group's objectives when managing capital are:

- › to safeguard the Group's ability to continue as a going concern and retain financial flexibility by maintaining a well managed balance sheet
- › to provide returns for shareholders and benefits for other stakeholders
- › to maintain a solid investment grade credit rating.

The Group is currently rated BBB (negative outlook) with Standard and Poor's and Baa2 (negative outlook) with Moody's.

Net debt

The net debt position of the Group is set out below.

£ millions	2016	2015
Cash and cash equivalents	1,459	1,703
Marketable securities	10	28
Net derivative financial instruments	(93)	(55)
Bonds	(2,420)	(2,284)
Bank loans and overdrafts	(39)	(38)
Finance leases	(9)	(8)
Net debt	(1,092)	(654)

Balance sheet net debt continues to benefit from the retention of proceeds from the sales of the Financial Times and the Economist. Despite the low balance sheet gearing, the Group has significant operating lease liabilities which are not currently included as balance sheet liabilities but are included by the credit rating agencies within debt.

The largest contribution to the increase in the sterling value of our net debt was from retranslation of the Group's dollar denominated debt from \$1.47 : £1 at 31 December 2015 to \$1.23 : £1 at 31 December 2016. The Group holds dollar debt as a natural hedge of the Group's largest earnings generating region, North America. Investment in capital expenditure and one-off restructuring charges resulted in negative cash flow for the year which represented the balance of the movement in net debt.

Liquidity and funding

The Group had a strong liquidity position at 31 December 2016, with over £1.4bn of cash and an undrawn US dollar denominated Revolving Credit Facility due in 2021 of \$1.75bn (at 31 December 2015, the Group had cash of over £1.7bn and an undrawn Revolving Credit Facility due 2020 of \$1.75bn). To ensure efficient use of the Group's cash balances, we announced on 24 February that we will trigger the early repayment option on our \$550m 6.25% Global dollar bonds 2018.

Key performance indicator ^P

Manage cash position effectively

See a summary of all our KPIs on p36-37 [→](#)

Operating cash flow, £m, headline

£663m +52%

2016	663
2015	435
2014	649
2013	588
2012	788

Operating cash increased to £663m in 2016 reflecting good cash conversion due to tight management of working capital and lower incentive payments in 2016. Over five years, operating cash flow has declined at an average rate of 7.6% per annum reflecting pressure on revenues in higher margin businesses, increased investment in digital and services and portfolio changes, partially offset by growth in digital and services and the benefits of restructuring.

Financial review

At the same time as the bond is repaid, we will unwind the associated interest rate swaps which convert the bond to a floating rate of US dollar *libor* + 1.81%. The transactions will result in a modest premium payable in 2017, which was included in our interest guidance of £74m in 2017.

Taxation

Our tax rate in 2016 was 16.5% (2015: 15.5%). The increase in tax rate was primarily due to a smaller benefit from adjustments arising from the agreement of historical tax positions, partially offset by profits from joint ventures and associates, from which tax has already been deducted, being a larger proportion of total adjusted profits.

The reported tax benefit on a statutory basis in 2016 was £222m (8.7%) compared with a benefit of £81m (18.7%) in 2015. The statutory tax benefit in 2016 is mainly due to the release of deferred tax liabilities relating to tax deductible goodwill that has been impaired. The statutory tax benefit in 2015 was mainly due to benefits arising on the increase in intangible charges. Operating tax paid in 2016 was £63m compared with £129m in 2015.

Discontinued operations

Discontinued operations in 2015 relate to the sale of the Financial Times and the Group's 50% interest in The Economist. The Economist sale was substantially completed in October 2015 and realised a gain of £473m before tax. The remaining interest in The Economist was held at fair value and subsequently sold in the first half of 2016 without realising any further gain or loss. The sale of the Financial Times completed on 30 November 2015 and realised a gain of £711m before tax. The gains on these transactions and the results for 2015 to the respective sale dates have been included in discontinued operations.

Other comprehensive income

Included in other comprehensive income are the net exchange differences on translation of foreign operations. The gain on translation of £913m in 2016 compares with a loss in 2015 of £69m and has arisen due to the strength of the US dollar and many other currencies relative to sterling. In 2016, sterling weakened relative to many of the currencies that Pearson is exposed to. A significant proportion of the Group's operations are based in the US and the US dollar strengthened significantly in 2016 from an opening rate of £1:\$1.47 to a closing rate at the end of 2016 of £1:\$1.23. At the end of 2015, the US dollar had strengthened in comparison with the opening rate moving from £1:\$1.56 to £1:\$1.47 but this effect was more than offset by weakness in other currencies.

Also included in other comprehensive income in 2016 is an actuarial loss of £276m in relation to post-retirement plans of the Group and our share of the post-retirement plans of Penguin Random House (PRH). The loss mainly arises from the unfavourable impact of changes in the assumptions used to value the liabilities in the plans which in aggregate exceeded favourable returns on plan assets. The loss in 2016 compares with an actuarial gain in 2015 of £118m.

Dividends

The dividend accounted for in our 2016 financial statements totalling £424m represents the final dividend in respect of 2015 (34.0p) and the interim dividend for 2016 (18.0p). We are proposing a final dividend for 2016 of 34.0p, bringing the total paid and payable in respect of 2016 to 52.0p. This final 2016 dividend, which was approved by the board in February 2017, is subject to approval at the forthcoming AGM and will be charged against 2017 profits. For 2016, the dividend is covered 1.1 times by adjusted earnings.

Post-retirement benefits

Pearson operates a variety of pension and post-retirement plans. Our UK Group pension plan has by far the largest defined benefit section. We have some smaller defined benefit sections in the US and Canada but, outside the UK, most of our companies operate defined contribution plans.

The charge to profit in respect of worldwide pensions and retirement benefits for continuing operations amounted to £70m in 2016 (2015: £81m) of which a charge of £81m (2015: £85m) was reported in adjusted operating profit and an income of £11m (2015: £4m) was reported against other net finance costs.

The overall surplus on the UK Group pension plan of £337m at the end of 2015 has decreased to a surplus of £158m at the end of 2016. The movement has arisen principally due to lower discount rates used to value the liabilities partially offset by continuing asset returns and deficit funding. As a consequence of the disposal of the FT Group in 2015, we have agreed to accelerate the funding of the UK Group pension plan and as a result the plan is expected to be fully funded on a 'self sufficiency' basis by 2019, inclusive of payments in 2017 in relation to the PRH merger in 2013, currently estimated at £225m.

In total, our worldwide net position in respect of pensions and other post-retirement benefits decreased from a net asset of £198m at the end of 2015 to a net asset of £19m at the end of 2016.

Goodwill and Intangible assets

At the end of 2016, following trading in the final quarter of the year, it became clear that the underlying issues in the North American higher education courseware market were more severe than anticipated. These issues related to declining student enrolments, changes in buying patterns of students and correction of inventory levels by distributors and bookshops. As a result, in January 2017, we revised our strategic plans and our estimates for future cash flows and as a consequence made an impairment to North American goodwill of £2,548m.

In 2015, following economic and market deterioration in the Group's operations in emerging markets and ongoing cyclical and policy related pressures in the Group's mature market operations we impaired intangible assets in North America by £282m, in Core markets by £37m and in Growth markets by £530m.

Acquisitions and disposals

There were no significant acquisitions in 2016 or 2015. In 2016 we closed our English language schools in Germany and also sold the Pearson English Business Solutions business. These two disposals together with other smaller disposal related items gave rise to an aggregate loss of £25m.

During 2015 the Group disposed of its interest in the FT Group including its 50% share of the Economist. The Financial Times sale to Nikkei was completed on 30 November 2015 for consideration of £858m and realised a gain on sale of £711m before a tax charge of £49m. The sale of our 50% share of the Economist Group to EXOR was substantially completed on 16 October 2015. The value of the investment in the Economist on Pearson's books was not significant and there was no tax on the transaction with the result that the gain on sale of £473m largely reflects the proceeds

received. Both the gain on the FT and the Economist were reflected in discontinued operations in 2015. Other disposals reflected in continuing operations in 2015 include the gain on sale of PowerSchool of £30m and net losses of £17m from the sale and write down of smaller non-core businesses and investments.

Return on invested capital (ROIC)

Our ROIC is calculated as total adjusted operating profit less cash tax, expressed as a percentage of average gross invested capital. ROIC decreased from 5.8% in 2015 to 5.0% in 2016. The movement largely reflects lower profit in the year partly offset by reduced tax payments.

Related party transactions

Transactions with related parties are shown in note 35 of the financial statements.

Post balance sheet events

On 18 January 2017, we announced the intention to issue an exit notice to Bertelsmann regarding the 47% associate interest in PRH with a view to selling the stake or recapitalising the business and extracting a dividend.

On 24 February, we announced the intention to trigger the early repayment option on our \$550m 6.25% Global dollar bonds 2018. There were no other significant post balance sheet events.



Coram Williams
Chief financial officer

Key performance indicators

We measure our progress against three broad categories of KPIs: financial objectives, business measures and sustainability measures.

The business measures category has been introduced this year to monitor our progress in simplifying our operations while strengthening our brand, culture and reputation.

These two pages summarise performance against all of these KPIs. More details on the performance, trends and factors influencing select KPIs are described within the relevant sections throughout the report.

R Linked to directors' remuneration

Note: For 2016 we have rationalised our KPIs to reflect our priorities in transforming the business. Our strategic growth drivers are explained on p14-19 and progress will be reviewed throughout 2017.

The KPIs are non-GAAP measures and are included as they are key financial measures used by management to evaluate performance and also for investors to track the underlying operational performance of the Group. Reconciliations to the equivalent statutory heading under IFRS are included in the corporate and operating measures on p194-195.

FINANCIAL OBJECTIVES

Maintain long-term growth

Indicator	Underlying performance	Reference
Sales R	-8%	See p31 →
Total adjusted operating profit R	-21%	See p31 →

Deliver sustainable returns

Indicator	Headline performance	Reference
Total adjusted earnings R	-16%	See p32 →
Return on invested capital	-0.8 percentage points	See p32 →
One-year total shareholder return	-18.2%	See p5 →
Dividend per share	unchanged	See p5 →

Manage our cash position

Indicator	Headline performance	Reference
Operating cash flow R	+52%	See p33 →

BUSINESS MEASURES

Transform the business

Indicator	Performance
Cost savings	£275m
Global headcount reduction	4,600

Talent and employee engagement

Indicator	Performance
Employees who are proud to work for Pearson	68%
Employees inspired by Pearson's purpose	74%

Pearson employee engagement survey, 2016

Strengthen brand and reputation

Indicator	Performance
Awareness of Pearson amongst teachers, learners and parents	57%
Favourability of those aware of Pearson	88%

Pearson brand tracker survey of key markets, 2016

SUSTAINABILITY MEASURES

Deliver gender diversity

Indicator	Performance	Reference
Female board members	30%	See p25 →
Female senior managers	32%	See p25 →
Female employees	60%	See p25 →

Reduce our carbon footprint

Indicator	Performance	Reference
Global greenhouse gas emissions CO ₂ e tonnes	126,385 -13.7%	See p25 →

Maintain community investment

Indicator	Performance
Target 1% or more of pre-tax profits	£6.8m +1.2%

Operating performance

North America

Market summary

Our largest market includes all 50 US states and Canada.

Contribution to Group revenues

65%

Sales

£2,981m

Adjusted operating profit

£420m



Key efficacy finding

5x

Increase in probability of students passing remedial college math through use of MyLab Math (from 10% to 53%).

In 2016, we expanded our efficacy agenda to include every one of our strategic priorities in North America. We are beginning to generate compelling findings and using research insights to drive product improvement. This investment will help us reach more learners and have greater impact.

Revenues rose 1% in headline terms benefiting from a stronger US dollar, but declined 10% in underlying terms due to a significant decline in US higher education courseware, together with anticipated declines in school assessment, due to previously announced contract losses and in school courseware, due to a smaller adoption market and our lower participation rate, partially offset by growth in professional certification, virtual and blended schools and online programme management.

Adjusted operating profits fell 13% in headline terms and 28% at CER and underlying due primarily to the impact of lower sales in US higher education courseware.

Courseware

In **school courseware**, revenue declined 10% with a smaller new Adoption Market and our lower participation rate partially offset by good growth and market share gains in Open Territories resulting from new product launches. Our new adoption participation rate fell from over 90% in 2015 to 64% in 2016 due to our decision not to compete for the California Grades K-8 English Language Arts (ELA) adoption with a core basal programme. We won an estimated 30% share of adoptions competed for (31% in 2015) and 19% of total new adoption expenditure of \$470m (29% of \$730m in 2015) driven by strong performance in Indiana Math and Social Studies and South

Carolina Science and Social Studies. In Open Territories, we grew strongly benefiting from our new MyPerspectives programme in Grades 6–12 ELA, ReadyGen, Investigations 3.0, the extension of enVisionMATH to cover Grades 6–8 and growth in our digital reading intervention programme, iLit.

In **higher education courseware**, total US college enrolments fell 1.4%, with combined two-year public and four-year for-profit enrolments declining 5.0%, affected by rising employment rates and regulatory change impacting the for-profit and developmental learning sectors, partially offset by modest growth in combined enrolments at four-year public and private not-for-profit institutions. Net revenues in our US higher education courseware business declined an unprecedented 18% during the year. We estimate 2% of this decline was driven by lower enrolment, particularly in Community College and among older students; 3–4% by an accelerated impact from rental in the secondary market; and approximately 12% due to an inventory correction in the channel reflecting the cumulative impact of these factors in prior years. Underlying market share trends remained stable and our market share in the 12 months to January 2017 was 40.4%.

During 2016, we performed strongly in Science and Business & Economics with key titles including: *Applying, Biochemistry: Concepts & Connections 1e*; Amerman, *Human Anatomy & Physiology 1e*; Marieb, *Human Anatomy & Physiology 10e*; Young, Freedman,

Deb's story



United States
Connections Education

"For the past year, I have had the privilege of serving as principal of Troy Intersect Virtual Academy in Troy, Michigan. Previously I was not impressed with K-12 online education.

Working with the students and educators of Intersect and the staff at Pearson Online & Blended Learning has changed my perception about virtual learning.

I discovered that not all online programmes are alike. With Troy School District's high academic standards, I now understand why it selected Pearson Online & Blended Learning's programme for our online students. The curriculum is rigorous and equal to the academic expectations of our district. Students are well supported by certified online teachers and tutors, and they have access to a full-time district counsellor, classroom teacher, classroom para-pro and principal.

Most of my personal and professional friends are amazed at my attitude change about K-12 online learning. My involvement with Pearson Online & Blended Learning's well-developed programme has helped me to understand that one education model does not meet the needs of all students."

Deb MacDonald Linford
Principal, Troy Intersect Virtual School

University Physics 14e and *Parkin, Economics 12e*. Global digital registrations of MyLab and related products grew 2%. In North America, digital registrations grew 2% with good growth in Science, Business & Economics and Revel partly offset by continued softness in Developmental Mathematics. Skill Builder Adaptive Practice, our in-house adaptive homework solution launched in over 60 titles in 2016.

Faculty-generated studies indicate that the use of MyLab, Mastering and Revel programmes, as part of a broader course redesign, can support improvements in student test scores and lower institutional cost. Findings from an efficacy study suggest that students in Developmental Mathematics courses who increased their number of homework and quiz attempts in MyMathLab-Developmental increased their odds of passing; and that users of MyLab Writing who complete seven topics or more increase their final exam scores by 14%. In another study at a mid-sized university in the Midwest, during the 2015-2016 academic year, students using My IT Lab were able to raise their exam scores by half a letter grade for every seven additional activities attempted. In institutional courseware solutions, Pearson signed 148 large-scale, enterprise adoptions of direct digital access (DDA), where content is purchased via an upfront course fee and integrated with university IT systems. New signings in the year included University of Tennessee – Knoxville and Kentucky State University.

Assessment

In **school assessment** (State and National Assessments), revenues declined 22% due to previously announced contract losses. The states of Arkansas, Mississippi and Ohio discontinued PARCC assessments and we ceased to administer the majority of the current Texas STAAR contract, as announced in 2015. We replaced the loss from Massachusetts leaving PARCC by winning a five-year sub-contract to deliver Massachusetts' new custom assessment. We were awarded a one-year emergency contract in Tennessee to score and report 2016 state assessments. Kentucky renewed a contract with Pearson for two years to provide its state assessments in Math, English Language Arts, and Science. Arizona extended Pearson's contract to provide the English language learner assessments for the 2016–2017 school year, while Colorado extended a contract with Pearson to provide PARCC, science and social studies assessments. We won new contracts in Delaware for social studies assessment and a sub-contract to develop high school math and English language arts assessments in Louisiana. We delivered 23.6 million standardised online tests to K-12 students, a reduction of 11% from 2015 due to overall reduction in test counts across contracts. Paper-based standardised test volumes fell 33% to 21.9 million. Digital tests on Pearson's TestNav platform now account for over 52% of our testing volumes. We launched *aimswebPlus™*, an update to our leading formative assessment platform, first launched in 2000.

In **professional certification**, revenues grew 7% with VUE global test volume up 3% to almost 15 million, boosted by continued growth in IT, professional, US teacher certification programmes and strong growth in GED (General Educational Development, the high school equivalency test that is part of a joint venture with the American Council on Education). We renewed our contracts with the Computing Technology Industry Association (CompTIA) for three years, the Florida Department of Business & Professional Regulation for five years, the American Register of Radiologic Technologists (ARRT) for seven years and a contract to administer insurance back office licensing services in North Carolina for five years.

Clinical assessment sales declined 1% following the strong performance over the previous two years driven by the introduction of the fifth edition of the *Wechsler Intelligence Scale for Children (WISC-V)*. *Behavior Assessment for Children 3e (BASC)* continues to see strong growth; and Q-Interactive, Pearson's digital solution for clinical assessment administration, saw continued strong growth in licence sales with sub-test administrations up more than 80% over the same period last year.

Kelley & Courtlyn's story

 **United States**
Connections Education

Texas twins Kelley and Courtlyn Ranly were looking for an education option that would both challenge them academically and allow them the time needed to compete in rodeo competitions when they found online public school Texas Connections Academy.

With the flexibility of online school, both students were able to pursue their passion for rodeo, volunteer at a local veterinary clinic, act as Texas 4-H Livestock Ambassadors, and show their sheep and goats at stock shows throughout the state. The twins have amassed more than 100 awards for their extracurricular activities. Courtlyn and Kelley currently attend

Texas A&M University as animal science majors, with the shared goal of one day opening a veterinary clinic together.

“We wanted our daughters to be challenged, we wanted them to have the opportunity to excel, experience and grow as much as possible, because these years are formative years that will help determine what kind of an adult they are going to be,”

says Miki Ranly, their mother.



Kelley and Courtlyn Ranly
Graduates – Texas Connections Academy

Operating performance

Services

Connections Education, our virtual school business, served nearly 73,000 full-time equivalent students through full-time virtual and blended school programmes, up 6% on last year. Connections revenues grew 8%. Five new full-time online, statewide, partner schools opened for the 2016–17 school year in Arkansas, Washington, Colorado, Pennsylvania and New Mexico. The 2016 Connections Education Parent Satisfaction Survey showed strong results with 92% of families with students enrolled in full-time online partner schools stating that they would recommend the schools to others.

In **Pearson Online Services**, our higher education OPM business, course enrolments grew strongly, up over 19% to more than 314,000, boosted by strong growth in Arizona State University Online, new partners and programme extensions. We signed 11 new programmes in 2016 including two new partners: Eastern Gateway Community College in collaboration with American Federation of State, County and Municipal Employees, and we took over an existing suite of online Nursing programmes with Duquesne University. Strong growth in OPM was partially offset by a decline in Learning Studio, which is currently being retired. Overall revenues grew 5%.

Core

Market summary

Our international business in established and mature education markets including the UK, Australia and Italy.

Contribution to Group revenues

18%

Sales

£803m

Adjusted operating profit

£57m



Key efficacy finding

3 months

Number of months Bug Club readers are ahead in word recognition when compared with others, after 12 months of use.

In 2016, we took significant steps forward in Core in measuring and improving the efficacy of our digital courseware, assessments, and services. All of our highest priority products and services are making progress on the path to efficacy.

Revenues declined 1% in headline terms, were down 7% at CER reflecting the closure of Wall Street English Germany, disposal of other sub-scale businesses and the transfer of some smaller businesses to our Growth segment, and declined 4% in underlying terms, primarily due to expected declines in vocational course registrations in UK schools and courseware. This was partially offset by strong growth in English assessments in Australia and OPM services in the UK and Australia. Adjusted operating profit declined 51% primarily due to lower revenues in UK student assessment.

Courseware

Courseware revenues declined 7%. In-school revenues declined in smaller markets in Europe and Africa, in Australia as we exited a number of sub-scale market segments and in UK primary due to a smaller adoption cycle, partially offset by growth in secondary in the UK due to new product launches aligned with our qualifications and the successful delivery of The Crunch food project in partnership with the Wellcome Trust. In higher education courseware, revenues declined in smaller markets, in Australia due to phasing and in the UK as we exited sub-scale market segments. In the UK, 2.1 million pupils are now using a Pearson digital service on ActiveLearn Primary, including Bug Club, up from 1.8 million a year ago. In a randomised

Kumar's story



Australia
Pearson Test of English (PTE) Academic

Kumar Kufle grew up in eastern Nepal. As a child he would walk to and from school every day, which was a two to three-hour round trip. When Kumar was nine years old, he saw a Western tourist couple carrying their child on their back. The child was the same age as Kumar, and at the time Kumar was carrying a heavy load that would have weighed more than his own body weight. This experience made Kumar curious about the Western world and inspired him to learn English.

“Since then I always had a dream to learn English.”

Kumar learnt English at boarding school and came to Australia to study further.

“I took my PTE Academic test for my graduate visa. I chose PTE Academic because it's got better availability for tests. It is fairer because it's got automated scoring, and I got my score results back faster. I got the result that I needed... and enrolled in a professional year programme. Now I am doing an internship in finance in a multinational company.”



Kumar Kufle

control trial, where its impact was periodically assessed, Bug Club was shown to have made a highly statistically significant impact on pupils' reading, vocabulary and spelling performance, with a greater positive impact in schools with a higher proportion of children receiving free school meals.

Assessment

In [higher education and school assessment](#), revenues fell 10%. UK qualifications have been impacted by government policy, where changes to accountability measures have led to lower vocational registrations. As expected, BTEC Firsts registrations in UK schools have begun to stabilise, though overall BTEC and apprenticeship registrations continued to fall in 2016 albeit at a slower rate. GCSE and GCE entries for summer 2016 declined modestly compared with 2015, primarily due to lower AS level entries as a result of a policy-driven shift to more linear courses. We successfully delivered the National Curriculum Test for 2016, marking 3.4 million scripts and successfully implemented the transition from levels to scaled scores.

[Clinical assessment](#) grew 9% with Australian revenues benefiting from strong growth in the new edition of the WISC-V.

At [VUE](#), revenues declined 1% due to the initial impact of contract renewals. We were awarded contracts: to continue to

administer the UK driving theory test for the UK DVSA for four years from September 2016; to continue to provide testing services to the Construction Industry Training Board for four years from April 2017; and to administer the UK Clinical Aptitude Test for five years from January 2017. In France, VUE was awarded a new licence by the Délégation à la Sécurité et à la Circulation Routières (DSCR) du Ministère de l'Intérieur to be one of the providers administering the country's computer-based driving theory exam throughout France.

The [Pearson Test of English \(PTE\) Academic](#) saw continued strong growth in global test volumes with the Australian Department of Immigration and Border Protection and New Zealand immigration accepting the test for proof of English ability for a range of student visas. The number of professional associations using PTE Academic to credential English language standards of their members continued to grow and now includes the Australian Nursing & Midwifery Accreditation Council. All Australian and NZ universities now accept PTE Academic for admissions purposes, as do most of the UK and Canadian universities, and a growing number of US institutions including Harvard Business School, Yale and Wharton Business School.

Services

In [higher education services](#), revenues grew 12%. Our OPM revenues grew 74%. In Australia, we saw strong growth due to our successful partnership with Monash University, led by the Graduate Diploma in Psychology, now one of Monash's largest postgraduate courses. Our partnership with Griffith University remains strong, with performance driven mainly by the MBA course. In the UK, our ongoing OPM partnership with King's College London saw us commence teaching in early 2016 of several post graduate Psychology and Law programmes. We have signed an additional partnership with Manchester Metropolitan University to launch three online postgraduate degrees in Business Studies in 2017, and have also partnered with another Russell Group University to launch a wide range of online postgraduate programmes over the next four years.

[Wall Street English](#) revenues grew strongly in Italy as we opened new centres and rolled out the New Student Experience (NSE) in all centres in the country. The NSE delivers a next generation Wall Street English service with adaptive, personalised learning incorporating Pearson's Global Scale of English. We announced the closure of our unprofitable Wall Street English schools in Germany.

Market spotlight



Pearson partnered with independent, not-for-profit public policy institute the Mckell Institute in Australia to launch *No Mind Left Behind* – a research report examining the education system in Australia.



Report author and policy officer at the Mckell Institute Marieke D'Cruz said:

“The report indexes education opportunity in Australia by electorate, plus makes recommendations to government on how to improve the education system – from early childhood to lifelong learning. Pearson was as passionate as us to ensure the report was an independent output, and we welcome one of their first forays into the education debate in Australia.”



Marieke D'Cruz

Operating performance

Growth

Market summary

Our growth markets in emerging and developing economies with investment priorities in Brazil, China, India and South Africa.

Contribution to Group revenues

17%

Sales

£768m

Adjusted operating profit

£29m



Key efficacy finding

28 points

Positive score differential between our NAME sistema students and their peers in similar schools. The difference equates to roughly one level higher on the national exam.

In 2016, we invested in new products that will deliver better outcomes for more learners across K-12, English, and Higher Education. These products will help improve access to quality education that helps people make progress in their lives.

Revenues grew 8% in headline terms, were flat at CER reflecting the transfer of some smaller business from Core partially offset by the sale of smaller sub-scale businesses and down 1% in underlying terms. In China, growth in adult English language learning and English courseware was partly offset by declines in English test preparation. In Brazil, revenues declined due to enrolment declines in our English language learning business, related to macroeconomic pressures. In South Africa, revenues grew strongly with growth in school textbooks, offset by enrolment declines at CTI. In the Middle East, revenues fell significantly due to our previously announced withdrawal from an agreement to run three Saudi Colleges of Excellence, with the colleges transitioning to new providers from 30 June 2015. Excluding the impact of the exit from this agreement, underlying revenues in Growth were up 1%.

Adjusted operating profit increased £32m to a profit of £29m reflecting the benefits of restructuring and the absence of a contract termination charge in the Middle East which impacted the first half of 2015.

Courseware

Courseware revenues grew 8%, due to strong growth in school textbook sales in South Africa and English language courseware in China, Argentina and Mexico partially offset by weakness in Brazil.

We saw strong growth in registrations for MyEnglishLab boosted by new editions of key titles such as *Speakout* and *Top Notch*. Middle East school courseware declined as a result of macroeconomic pressure and lower purchases from key international school clients.

Services

In **China**, growth in Wall Street English (WSE) was offset by declines at Global Education. Enrolments grew 8% at WSE, to 72,500. We launched the New Student Experience across all 68 WSE China centres, opened two new retail centres in Beijing and Shenzhen and a new corporate training centre in Shenzhen. In global education, we transferred two cities to franchisees. Underlying revenue declined with lower enrolments partially offset by an ongoing shift to more premium courses with smaller class sizes.

In **Brazil**, student enrolment in our sistemas business fell 9% due to attrition in NAME and Dom Bosco partially offset by new students at COC. Revenues grew slightly due to improved mix. Revenues in English language learning fell due to challenging economic conditions, partially offset by an increased footprint for our leading brand in language learning, Wizard, where new school openings expanded the number of franchise schools by 7% to 2,392.

Phumudzo's story

 **South Africa**
The Pearson Institute

Phumudzo Madzhe (26) is a successful businessman, investor, philanthropist, motivational speaker, financial literacy activist and alumnus of the Pearson Institute. He studied a Business Administration degree followed by Honours in Business Management.

Phumudzo is the youngest franchisee in the history of the Mike's Kitchen Group, responsible for strategic planning, all major investment decisions and organisational development. He is also one of the 40 young South Africans who were selected to participate in the 2016 Mandela Washington Fellowship for Young African Leaders.

Phumudzo believes he had an advantage by completing his studies at Pearson Institute.

“A whole world opened up in a way. It was not just theoretical, it was more practical. It is not just about what you learn today, it's about how you apply it tomorrow. I am currently doing my MBA and I am sailing through it because of the structure I learnt from Pearson Institute.”



Phumudzo Madzhe

At our public sistema NAME, an efficacy study suggested that, after controlling for all of the identified student and school level factors, grade 5 NAME students significantly outperformed comparison students by 28 points in mathematics equating to one level higher attainment in the state Prova Brasil assessment. In another study at our largest private sistema COC, students scored significantly higher than students in similar non-COC schools in writing, natural sciences, humanities, language, and mathematics.

In **South Africa**, student enrolment at CTI Education Group and Pearson Institute of Higher Education fell by 25% to 8,500 driven primarily by tightening consumer credit affecting enrolment rates.

In **India**, Pearson MyPedia, an inside service 'sistema' solution for schools comprising print and digital content, assessments and academic support services, expanded to over 200 schools with approximately 56,000 learners in its first full year since launch. PTE Academic saw nearly 50% growth in the volume of tests taken.

Penguin Random House

Penguin
Random
House

Pearson owns 47% of Penguin Random House, the first truly global consumer book publishing company.

Penguin Random House delivered a strong profit performance in 2016 with continued net benefits from the merger integration.

Revenues declined after a very strong performance in 2015, which was boosted by the success of multi-million sellers *Grey* and *The Girl on the Train*, and due to the anticipated industry-wide decrease in ebook purchases following 2015's industry-wide digital-terms changes. Revenues in 2016 benefited from strong sales of *The Girl on the Train* by Paula Hawkins, in its second year of publication, and Jojo Moyes's *Me Before You* and *After You*, together with broad resilience of print books, including growing print sales online and increased demand for audio books.

The US business published 585 *New York Times* print and ebook bestsellers in 2016 (2015: 584). The division benefited from multi-million copy successes of *The Girl on the Train* and two novels from Jojo Moyes. Additional number one adult titles were *The Whistler* by John Grisham; *Night School* by Lee Child; *Fool Me Once* by Harlan Coben; *When Breath Becomes Air* by Paul Kalanithi; and Ina Garten's *Cooking For Jeffrey*. Children's authors who extended their outstanding sales in 2016 included Dr. Seuss and Roald Dahl, whose *The BFG* benefited from a movie tie-in; Rick Yancey; James Dashner; Drew Daywalt; Oliver Jeffers; and R. J. Palacio.

The UK business published 202 titles on the *Sunday Times* bestseller lists (2015: 201). The division's top-selling hardback was *Night School* by Lee Child. *The Girl On The Train* sold over three million copies in multi-formats, and *Me Before You* and *After You* cumulatively sold more than 2.5 million. Top-performing children's franchises were Roald Dahl and the tenth volume in Jeff Kinney's *Diary Of A Wimpy Kid* series.

Penguin Random House completed the sale of its travel-content division, Fodors, to Internet Brands, an online media and technology company, on 30 June 2016, and transferred the ownership of Random House Studio, its film and television development and production division, to a division of Bertelsmann.

The integration of Penguin and Random House continued to provide benefits in 2016 including net benefits from the first full year of systems and warehouse combinations in North America and in Spain and Latin America.

Penguin Random House fiction and nonfiction authors with highly anticipated new books in 2017 include Dan Brown, Ron Chernow, Lee Child, Harlan Coben, Janet Evanovich, Ken Follett, John Grisham, Paula Hawkins, Jeff Kinney, Dean Koontz, Nigella Lawson, John le Carré, James Patterson, Philip Pullman, Sheryl Sandberg, John Sanford, Danielle Steel and Rick Yancey, as well as new Star Wars™ and LEGO® movie tie-in titles.

Market spotlight

Central to Pearson South Africa's transformation agenda is building partnerships within the educational landscape – government departments and NGOs – with the common purpose of making a measurable difference in the lives of learners across society, particularly in the area of literacy.

Mrs Tongo, principal of Luzuko Primary School in Gugulethu, where Pearson volunteers dedicated every Friday to small group reading sessions with Xhosa-speaking Grade 1 learners for 2016, notes:

“It is clear that Pearson has transformed our community. Parents did not want to send their children to our school, but the learners have gone home and told the families how they read in small groups with Pearson people who come specially to spend time with us. The children and community feel that we matter. We feel valued. Thank you Pearson.”

 South Africa
Partnerships



Mrs Tongo principal of Luzuko Primary School

Risk management

Pearson has a structured enterprise risk management (ERM) framework to support the identification and effective management of risks across Pearson.

The goal of our risk management approach continues to be to support Pearson in meeting its strategic and operational objectives, as set out in the chief executive's overview on p6-9, by ensuring that key business risks are identified, assessed and mitigated.

A discussion of the principal risks facing Pearson and mitigating factors can be found on p47-55 below. Our aim is to manage risks, understanding that many risks are external in nature and cannot therefore be fully controlled.

Our risk management framework

The diagram below, How we manage risk, shows our approach to risk management across Pearson and is being used not only to identify, assess and mitigate risk, but also to support our efforts to embed risk management best practice approaches across all levels of the business.

Our ERM framework has been developed to be aligned with international standards (COSO and ISO 31000) and it aids our compliance with the Financial Reporting Council's (FRC) UK Corporate Governance Code guidance on risk management.

Our journey

At the end of 2014, we completed a review of our risk management maturity in the following key areas of our framework against the revised 2014 UK Corporate Governance Code: foundations, managing risk, culture and working with third parties. We set maturity targets and made improvements towards meeting those in 2015. Our approach in 2016 remained consistent with the prior year in that we continued to further develop and embed the risk management framework, supported by the board and the audit committee.

We reassessed our risk management maturity against the targets we set ourselves and also set further targets for 2017, with plans in place to achieve these.

Foundations

Risk foundations cover all the elements which underpin successful ERM and risk management more broadly, across Pearson. It covers risk governance and oversight, policy, the risk framework itself and the risk management process, roles and responsibilities, risk appetite and our approach to working with third parties.

Governance, roles and responsibilities

The board, assisted by the assurance the audit committee provides, oversees the ERM framework, validates the target risk appetite for each key risk, monitors risk status and mitigation plans and verifies the viability statement process. Day-to-day enterprise risk management is undertaken by a dedicated ERM team, accountable to the board and audit committee.

For a list of the responsibilities of each, see p76 in the governance section.

How we manage risk

Our risk management framework is used to assess and drive consistent improvements in risk management across Pearson.



Policy and process

An ERM policy, along with the risk framework and supporting guidance, remained in place throughout 2016. The policy outlines our commitments to managing risk in accordance with international standards such as ISO 31000:2009, the COSO Framework and FRC's UK Corporate Governance Code guidance on risk management. To meet our commitments, all employees are required to be responsible and accountable for managing risk as reasonably practical within their area of responsibility. These standards are considered a minimum requirement and individual Pearson entities can tailor these, provided they do not conflict with the policy.

The effectiveness of the risk management process is assessed yearly in the annual effectiveness review, covered in more detail on p76 in the governance section.

Risk appetite

Risk appetite is defined as the degree of risk the board is prepared to accept in order for Pearson to achieve its strategy and goals and helps determine the level of mitigation and/or contingency plans put in place to reduce a risk. Examples of risks where we have a very low risk appetite and take as

much action as we are able to try to avoid and eliminate risk are those where we are complying with applicable laws such as anti-bribery and corruption or the safety and security of learners. For strategic risks, such as business transformation and change, these are opportunities as well as risks and we recognise the need to take well-informed and well-managed risks in order to achieve our strategic goals.

Pearson's leadership team sets the risk appetite and target for each key company-wide risk, as well as for risks in their individual businesses. Early in the year, these targets were reassessed against the current risk rating by the executive risk owner, then validated by the audit committee and the Pearson board.

Risk appetite targets form the baseline against which risk assessments are performed and risk monitoring takes place, as well as support decision-making regarding risk treatment (outlined in more detail under Managing risk).

Third parties

Managing the risks associated with third parties is a key element of the ERM framework. Drivers include outsourcing, franchising, legal and regulatory focus,

global supply chains as well as customer, consumer and investor expectations. The same core risk process applies: identify and prioritise, assess, mitigate and monitor. In 2016, we set up a cross-Pearson Group to better coordinate our approach to managing the risks associated with third parties, ensure improved consistency and raise awareness.

Managing risk

Risk context

The risk context sets the criteria against which the risks are assessed. It defines the external and internal parameters to be taken into account when identifying and assessing risk, as well as the scope of the risk management process (described earlier in this section).

The risk management policy, framework and supporting guidance includes a guide to risk assessment, how to determine risk probability and assess impact as well as instructions on how to translate these into an overall risk rating. Adaptations of these matrices, tailored for a specific business area, are in use and align with those in Pearson's ERM policy.

Risk in action case study – Pearson Test of English (PTE)

How risk management adds value to strategic and day-to-day business decision making

Following recent rapid growth of PTE, one of our successful global products, further work was needed to prevent any risks associated with future delivery, in order to ensure that quality was maintained and to avoid reputational risk.

Risk governance

A cross-company programme was set up in 2016, with workstreams based around identified risks and recommending actions in time for strategy decision-making in September. Each workstream owner was tasked with setting up their own working group to identify risks relating to their area, presenting these back for debate by the wider group, along with proposed recommendations for resolving them.

Risk treatment

Identified risks were rated in terms of their impact on the business in order to support their prioritisation and recommended courses of action were divided into two categories:

'Compliance' risks – potential areas that needed to be tackled in order to ensure ongoing secure delivery. These are risks for which we typically have a low risk appetite and were the highest priority to resolve.

'Opportunity' risks – these recommendations (sometimes requiring further investment) were identified as areas we needed to tackle to accelerate future growth of the product. We typically have a higher risk appetite for 'opportunity' risks.

A high-level summary of the risks and mitigation plans formed part of a strategic paper for the Pearson executive to make better informed decisions on the future strategic direction of (and related investment in) PTE.

Risk monitoring

Tracking the full set of recommendations will be part of business-as-usual in 2017, monitored by a cross-functional governance board who will also continue to identify opportunities for continuous improvement.

Risk management

Risk assessment

The identification and mitigation of significant business risks are the responsibility of senior management and leadership teams for each business area, supported by the ERM team. Throughout the year (twice as a minimum), key risks are identified using a bottom up and top down approach through discussions with each business area, identifying new risks as well as reassessing those already being monitored, including any known emerging risks. Horizon scanning takes place throughout the year to aid the identification of new risks.

Risks are categorised into four main areas: strategy and change, operational, financial, and legal and compliance.

- › Strategic – relating to the high-level plans and goals that are aligned with and support our strategy. This category is the most likely to contain risks that are also opportunities and therefore likely to have a higher risk appetite
- › Operational – involving people, systems and processes
- › Financial – involving financial planning, investments, budgeting, potential losses of and exposures to Pearson's assets
- › Legal and compliance – relating to the adherence to applicable laws and regulations. Risks in this category typically have a very low risk appetite.

The probability of a risk materialising (on a scale from 'rare' to 'almost certain') and the potential impact (from 'insignificant' to 'severe') of each risk is rated using existing criteria. Then the adequacy of action plans to address any remaining control gaps is assessed. A risk appetite is also agreed upon for each risk (aligning with the appetite for key company-wide risks where appropriate).

Risk treatment

Once assessed, the most appropriate course of action for each risk is decided. This can include risk avoidance such as not starting a particular activity; implementing mitigation or contingency plans to change the probability or reduce the impact of a risk; taking on increasing risk in order to pursue an opportunity, or sharing the risk with another party or parties. The risk treatment is arrived at by comparing the residual risk rating (i.e. the combination of probability vs. impact once existing

controls are taken into account) against the target risk appetite. Those with the largest gap require the greatest focus in terms of mitigation planning and ongoing monitoring.

Risk monitoring

In 2016, all identified Pearson-wide top risks were reassessed at least semi-annually against target risk appetite by Pearson leadership and senior management stakeholders. Risk discussions focus on where there is either a) the greatest change in risk ratings or b) the biggest gaps between the current risk rating and the target risk appetite, with the emphasis for the latter on the strength of mitigation plans in place.

Risk updates are submitted to the board and audit committee twice per year and include an assessment of the probability and impact of risks materialising, as well as risk mitigation initiatives and their effectiveness. The risks where there are the greatest gaps between target appetite and current rating, or the greatest change, are highlighted. This gives the board the opportunity to review, challenge and validate the effectiveness of Pearson's approach to risk management.

Information on the top risks for the next level down (i.e. for each business area), was also included in the ERM risk reporting. You can read more about how the business manages risk in the Embedding risk section under Culture below.

In addition, a series of risk deep dives took place at audit committees and board meetings throughout the year which focused on specific risks. You can read more about risk deep dives in the chairman of the audit committee's letter on p71-72, covering the following risks: business transformation, data privacy and information security, anti-bribery and corruption, and tax.

Culture

The ERM risk framework is also used to drive the integration of risk management approaches into the culture of the organisation, supported by the board, audit committee and leadership across the business. We continued to focus on and strengthen our risk culture throughout the year.

Communication and awareness

The ERM team is committed to raising awareness of the importance of risk

management and how employees can better manage risk day-to-day. The ERM team presented at leadership and team meetings regularly throughout the year, increased the ERM stakeholder group for the second consecutive year, as well as carried out specific scenario-based risk training.

Our Code of Conduct remained in place throughout 2016 to drive ethical and risk aware behaviours across the organisation. Online training on ethics and compliance has been developed, with a focus in 2016 on awareness raising.

Embedding risk

One of the key areas of focus for the ERM team in 2016 was improving the embedding of risk management across the wider organisation, driving best practices down below the Group risk level, to support strategic and operational decision-making.

All Pearson's business functions had their own risk map in place by the end of 2016, with risk information such as ownership and mitigation plans captured for each. Some teams already have detailed risk registers and processes for the next levels down. Just as for the company-wide risks, the risk process follows the framework for identifying, assessing, treating and monitoring risk and each risk is also assigned a risk appetite. Business areas monitor their own risks at least twice a year in line with ERM reporting (as these assessments help underpin the assessment of company-wide risks).

Risk assessments were also undertaken throughout the year on a number of strategic initiatives. The case study Risk in action (p45) describes one of these in greater detail, showing how risk governance and assessment supported business decision-making and led to value creation in 2016.

Continuous improvement

The risk framework sets the ERM team's strategy and is used, in conjunction with the maturity self-assessment, to set the team goals for each year. It is continually reviewed for its relevance and to identify any further areas for improvement. Many of the improvements made in 2016 have been highlighted in this section, such as the case study Risk in action (p45) and the progress made embedding risk management across the business.

Principal risks and uncertainties

The board of directors confirms that it has undertaken a robust assessment throughout 2016 of the principal risks facing the company, in accordance with provision C.2.1 of the 2014 UK Corporate Governance Code.

Our principal risks (as of 31 December 2016)

Listed in the table below (and shown on the adjacent risk map) are the most significant risks that may affect Pearson's future. A longer list of company-wide key risks, plus emerging risks, was monitored and reviewed throughout the year. The most material risks are those which have a higher probability and significant impact on strategy, reputation or operations, or a financial impact greater than £50m, and are identified as principal risks.

The following principal risks also relate to the material issues considered in the 2015 sustainability report: products and services, testing failure, political and regulatory risk, data privacy, information security, customer digital experience, and safety and corporate security. You can read more about sustainability, including a comparison table of sustainability material issues and principal, company-wide and other business risks on p22.

The risk acquisitions, divestments and joint ventures is no longer a principal risk: just as in 2016, acquisitions are a lower priority in 2017 and not likely to be material. There may be some separation or execution risk with certain divestments, but we do not expect such risk to be material. In 2016, we completed the separation of the FT and we undertook corporate transactions to de-risk the business, which in some cases resulted in exiting countries with greater compliance risk. We expect a similar approach in 2017, looking at ways to reduce our exposure to non-core businesses. We have announced our intention to issue an exit notice to Bertelsmann regarding the 47% associate interest in PRH with a view to selling the stake or recapitalising the business and extracting a dividend.

Principal risks: levels and 2016 change



Key
0
Net risk Probability and impact are based on residual risk, i.e. after taking into account controls already in place and assumed to be operating effectively.
→
Indicates change in 2016
 For more information see principal risks and uncertainties tables p48-55.

Strategy & change

	Executive responsibility
1 Business transformation and change	Chief executive officer
2 Products and services	President, global product
3 Talent	Chief human resources officer
4 Political and regulatory risk	Chief corporate affairs and global marketing officer

Operational

	Executive responsibility
5 Testing failure	President, assessments
6 Safety and corporate security	Chief human resources officer
7 Safeguarding and protection	President, assessments
8 Customer digital experience	President, global product Chief technology and operations officer
9 Business continuity	Chief financial officer

Financial

	Executive responsibility
10 Tax	Chief financial officer
11 Treasury	Chief financial officer

Legal & compliance

	Executive responsibility
12 Data privacy and information security	Chief technology and operations officer General counsel
13 Intellectual property	General counsel
14 Anti-bribery and corruption	Chief financial officer
15 Competition law	General counsel

Principal risks and uncertainties

Strategy & change

1 Business transformation and change¹

The pace and scope of our business transformation initiatives increase our execution risk that benefits may not be fully realised, costs may increase, or that our business-as-usual activities may be impacted and do not perform in line with expectations.

S Link to strategic goals
Develop digital & services
Build market presence
Deliver measurable outcomes

1 Incorporates 'Data quality and integrity'.

2016 activities

As highlighted in the chairman's introduction on p4, 2016 continued to be a year of transformation and change for Pearson, supported by the board. The restructure and associated cost savings programme announced at the start of the year was delivered in full in 2016. The first implementation of The Enabling Programme – a programme of work to deliver a single Pearson-wide solution to integrate our data, systems and processes across HR, finance, procurement and supply chain – went live in the UK. Key to the success of our change programmes is the quality of data (reported as a separate principal risk in 2015). The unavailability of timely, complete and accurate data limits informed decision-making and increases the risk of noncompliance with legal, regulatory and reporting requirements.

Controls

- › Project and change management best practices
- › Enhanced governance and reporting, including monthly updates on the most significant change initiatives to the Pearson executive, board and audit committee
- › Monthly assurance reporting on the programmes.

2017 plans

In 2017, business transformation and change initiatives will be supporting our strategic goal to accelerate our digital transition in higher education, to manage the print decline, and to reshape our portfolio.

A key pillar in our strategy, as emphasised in the CEO's strategic overview on p7, is underpinning our content and assessment with our technology and services. We are speeding up work to simplify our global learning platform and enhancing our courseware service capabilities.

We will also continue with the next phase of The Enabling Programme to further progress the simplification of our business (the importance of which our chairman highlights on p4), reduce costs and improve our data capabilities. The focus will be on customer and product master data as core to all systems and businesses.

[See CEO's strategic overview on p6-9.](#)

2 Products and services²

Failure to accelerate our shift to digital by developing and delivering (to time and quality) market leading global products and services that will have the biggest impact on learners and drive growth; ensuring Pearson offers products to market at the right price and with a deal structure that remains competitive as well as supports our strategy.

S Link to strategic goals
Develop digital & services
Build market presence
Deliver measurable outcomes

2 Referred to as 'Digital and services evolution and market forces' in the 2015 annual report.

2016 activities

This risk remains one of our highest as it is central to our growth strategy. The end of 2016 saw unprecedented declines in our US higher education courseware business (as described in full in the Performance section on p38) which we failed to adequately anticipate and build into our forecasts.

Significant activity took place in 2016 to mitigate this risk and support the growth of Pearson. We have combined our lines of business for courseware into a single product organisation, as well as rationalised and integrated our product development capabilities to focus on learning and user experience design, and more adaptive, personalised learning in next generation courseware and online services. In 2016, we completed initial portfolio reviews on global school, US higher education courseware and higher education managed services, capturing opportunities for shifts in focus and better differentiation.

The Global Product Lifecycle continues to be embedded across Pearson to enable visibility and transparency into our product investment decisions using the Global Product Lifecycle stages and gates, data-driven decision-making and incremental funding principles.

Controls

- › Separate school, higher education and English product teams brought together into one global product organisation
- › Product Development Lifecycle

- › Product and portfolio councils launched
- › Product portfolio management approach and benefits articulated.

2017 plans

Turning this risk into an opportunity – successfully accelerating our shift to digital as well as investing in and delivering the right products and services – is key to successful business performance in 2017.

In the CEO's strategic overview on pages 6-9, we have laid out our strategy in more detail. Key elements that relate to the products and services risk are:

Accelerating work to simplify our product learning platform and enhancing our courseware service capabilities with £50m of additional investment, which will remove barriers to faster product innovation, accelerate our product roadmap by two years and drive faster adoption of institution-wide digital direct access for Pearson courseware.

Increasing our participation in the courseware rental market, by:

- a. Reducing eBook rental prices by up to 50% across 2,000 titles – making digital rental the best option for price-conscious students,
- b. Launching our own print rental programme, piloting with an initial group of 50 titles made available through Pearson's approved rental partners, and ensuring Pearson is paid more often for the usage of our courseware. If successful, we will scale this programme rapidly.

[See Develop digital & services on p14.](#)

Strategy & change

3 Talent

Failure to attract, retain and develop staff, including adapting to new skill sets required to run the business.

S Link to strategic goals
Develop digital & services
Build market presence
Deliver measurable outcomes

2016 activities

The restructure and associated cost savings programme announced at the start of the year was delivered in full in 2016.

We have successfully recruited in-demand skill sets in support of our strategic goals to accelerate the shift to digital, including the appointment of global leaders to lead both the business and the transformation efforts in North America. Throughout the year, we have continued to promote our internal talent filling 45% of our open roles with internal staff.

Controls

- › Globally consistent performance, talent and succession management approaches established
- › Annual global employee engagement survey conducted with follow-up action plans in place
- › Retention data is monitored on a monthly basis
- › Exit interviews are conducted and monitored globally to identify any trends and concerns
- › Learning programmes now offered on a single platform with access to new content for all staff.

2017 plans

Over 60% of our staff completed the engagement survey. The results of the survey have been shared with all line managers and action planning will take place at the start of 2017. Each member of the Pearson executive will work in partnership with human resources and corporate affairs to build business-level action plans.

[See p23 in Sustainability for more on the engagement survey.](#)

Oversight of succession plans and development planning has been improved with rigorous quarterly talent reviews implemented for 2017.

Further learning programmes will be launched within our Pearson U learning platform with a strong emphasis on leadership and technology.

4 Political and regulatory risk

Changes in policy and/or regulations have the potential to impact business models and/or decisions across all markets.

S Link to strategic goals
Build market presence

2016 activities

Work was undertaken in 2016 to ensure that we can more proactively identify and mitigate political/regulatory risk that had the potential to impact Pearson globally; bringing greater co-ordination, clarity and consistency to our work; building political and institutional relations, and increasing our ability to receive and respond to external intelligence.

In June 2016, a UK referendum voted in favour of leaving the EU. A risk assessment of impacts arising from this was carried out and continues on an ongoing basis. There has been no significant downside for Pearson identified so far following the result of the referendum. The main risk arising at this stage for Pearson is the resulting overall uncertainty.

2017 plans

Following the inauguration of a new President of the US, in 2017 Pearson will continue to implement its state strategy which will ensure engagement with new office holders. We will build on the groundwork already done in Washington, DC and state capitals throughout the US to position Pearson as a leader in the education space and to establish the company as a key partner for Governors and state legislators as they pursue their economic agendas. This work will focus on Congress, the Administration, and in priority state capitals.

In the UK, 2017 is a year of major qualification and accountability changes. Our focus is on working with government, regulator and other stakeholders to demonstrate the professionalism and solidity of the system. We have increased engagement with Department for Education officials ahead of major periods of change (key moments include summer Key Stage 2, GCSE and A Level 2017 results).

We will continue to assess the potential impacts of the UK's decision to leave the EU as the model that will replace our membership becomes clearer.

Principal risks and uncertainties

Operational

5 Testing failure

Failure to deliver tests and assessments and other related contractual requirements because of operational or technology issues, resulting in negative publicity impacting our brand and reputation.

S Link to strategic goals
Build market presence
Deliver measurable outcomes

2016 activities

Pearson is an education content, assessment and related services company and, as such, managing this risk remains a priority. In the UK, the summer exam series was delivered more smoothly than the previous year as a result of mitigating actions taken. Action plans were put in place for US schools assessment, for example to mitigate against future outages and disruption.

Controls

We seek to minimise the risk of a breakdown in our student marking systems with the use of:

- › Robust quality assurance procedures and controls
- › Oversight of contract performance
- › Investment in technology, project management

and skills development of our people, including software security controls, system monitoring, pre-deployment testing, change controls and the use of root cause analysis procedures to learn from incidents and prevent recurrence.

2017 plans

Investigation is under way to mitigate risks around compatibility and responsiveness of our assessment tools by using cloud and web services.

The migration and retirement of legacy systems in use will continue.

Plans are being developed to upgrade Pearson's bespoke online marking system – ePEN in the UK in 2017 and to continue with mitigating actions put in place in the 2016 summer series in the meantime.

6 Safety and corporate security

Risk to safety and security due to increasing local and global threats.

2016 activities

Good progress was made in 2016 towards achieving our three-year health and safety strategy. The implementation of health and safety standards continued, plus health and safety reviews have now been formally included in management review processes in our businesses.

During 2016, the travel security programme was reviewed and a revised process implemented to include improved traveller communications. The Travel ASSIST app was also updated to allow access for the circa 44,000 associates, including assessors, examiners and validators, who will be able to see their itinerary, country information and alerts. The importance of continuing to develop and extend this was evidenced during the Hoboken train incident in September 2016, when 37 travellers in the area were successfully contacted via the travel management tool.

Controls

- › Up-to-date global health and safety policy in place
- › Management review processes are established with key leadership groups
- › Incident data collected globally every six months.

2017 plans

The ongoing focus of health and safety will be the implementation of the three-year strategy which in 2017 will include enhancing our incident reporting procedures and processes globally.

Travel security improvements will continue towards automation, smoother communications and feedback from travellers. Security risk assessments will take place to review physical security measures at key facilities, and a corporate security policy, strategy and guidelines will be delivered.

7 Safeguarding and protection

Failure to adequately protect children and learners, particularly in our direct delivery businesses.

2016 activities

We continue to take safeguarding as a fundamental obligation to our young learners and a high priority. Safeguarding training was reviewed in 2016 and indicated good take-up and positive feedback regarding the content. Safer Schools materials have been developed in partnership with University College London (UCL), which will be rolled out to the relevant businesses, and development of a sexual harassment policy for our further education businesses commenced.

Controls

- › Safeguarding committee established
- › Metrics regarding safeguarding reports and training collected
- › Safeguarding policy and training.

2017 plans

We will continue to develop and question our practices around safeguarding in 2017, including developing external validation for our safeguarding strategy. The Safer Schools materials will be implemented in relevant businesses, as will the new sexual harassment policy.

Operational

8 Customer digital experience³

Challenges with reliability and availability of customer facing systems could result in incidents of poor customer digital experience and impact our customer service responsiveness.

↑ Increase in impact

Link to strategic goals
Develop digital & services
Build market presence
Deliver measurable outcomes

3 Referred to as 'Customer facing systems' in the 2015 annual report, reworded to reflect that this risk includes customer support as well as the actual system as part of the overall experience.

2016 activities

Managing this risk is critical to achieving our strategic goal of accelerating our shift to digital products and services, and crucially, becoming a trusted partner. We will only succeed if robust platforms and responsive customer support service underpin our content, assessment and services. The risk increased in 2016 due to the fact that, despite a comparably good customer back-to-school in 2016, there were issues in the area of our subscription management system (SMS) which negatively impacted our North American customers' ability to easily access our systems. The initial issues have been addressed.

Controls

- › Real-time monitoring of systems (for service disruptions) and reporting of operational performance used to identify issues
- › Project management disciplines in place to ensure enhancements and new products meet required standards.

2017 plans

Further investment is being made in 2017 in our global learning platform with products being developed on it for testing. Read more on this in 'our strategy in action' section on p14-15.

Mitigations are being put in place to prevent a reoccurrence of the 2016 back-to-school issues for customers, which are described further in the Develop digital and services section on p15.

Continued focus on customer service quality and responsiveness with specialised service for specific customer groups. We continue to invest in training agents to ensure that they are ready to handle the broad range of issues faced by learners and educators. We have also improved escalation processes so that we can be more responsive to complex issues that require engagement from product engineering teams.

9 Business continuity

Failure to have plans in place or plans are not properly executed. Crisis management and technology disaster recovery (DR) plans may not be comprehensive across the whole enterprise.

Link to strategic goals
Develop digital & services

2016 activities

A revised business resilience policy and supporting guidance was developed in 2016, identifying our exposure and risk as they relate to key products, sites, services and supply chain. A common crisis management framework was implemented, with training and scenario sessions running during 2016. Pearson won an external award for Business Continuity/Resilience Team of the Year, in recognition of the ongoing efforts and shifting focus from traditional business continuity towards resilience management.

Technology incidents are dealt with reactively and proactive closure of known DR gaps is prioritised based upon the importance of products and systems. Data centres are being consolidated, including greater use of cloud solutions. A schedule is in place for testing the DR of data centres.

Controls

- › Business resilience governance group has been established, meeting quarterly, with senior leaders from across the business
- › Key enterprise systems developed during 2016 (the Enabling Programme, oneCRM, and Identity and Access Management) have all been delivered with 'high availability' requirements to provide resilience
- › Product Lifecycle includes an explicit checkpoint to ensure appropriate resilience is built into new products.

2017 plans

Key Pearson locations identified that will be the priority for 2017 to ensure business resilience plans are in place and tested.

Crisis management training will continue across 2017.

Work continues to address any gaps in the DR arrangements for legacy systems where appropriate. Further data centre consolidation and migration to cloud services.

Principal risks and uncertainties

Financial

10 Tax

Legislative change caused by the OECD Base Erosion and Profit Shifting initiative, the UK exit from the EU, US tax reform or domestic government initiatives, potentially in response to the ongoing EU anti tax abuse activities, results in a higher effective tax rate, double taxation and/or negative reputational impact.

↑ Increase in impact

2016 activities

This risk has slightly increased during 2016 due to pending legislative changes, and the definition of the risk was reworded to take into account the external focus on transparency, linked to greater scrutiny and the potential for reputational damage. Plans are being put in place to manage the implementation of these legislative changes.

Controls

› Our tax strategy reflects our business strategy and the locations and financing needs of our operations. In common with many companies, we seek to manage our tax affairs to protect value for our shareholders, in line with our broader fiduciary duties. We are committed to complying with all statutory obligations, to undertake full disclosure to tax authorities and to follow agreed policies and procedures with regard to tax planning and strategy

› Oversight of tax strategy is within the remit of the audit committee, which receives a report on this topic at least once a year. All of the audit committee members are independent non-executive directors. The chief financial officer is responsible for tax strategy; the conduct of our tax affairs and the management of tax risk are delegated to a global team of tax professionals. See p133 for details of tax accounting policy

› Media and public scrutiny on tax issues continues to be actively monitored by group tax and corporate affairs.

2017 plans

Continued close monitoring with advisers on proposed and potential legislation changes and possible impacts.

Potential impact of the UK's decision to leave the EU, and the inauguration of a new President in the US are being closely monitored. There could be significant changes to the US and UK tax regimes including VAT and withholding tax. It is too early to know what these changes will be, or any impact they may have.

Media and public scrutiny on tax issues will continue to be actively monitored by group tax and corporate affairs.

11 Treasury

Failure to manage treasury financial risk (e.g. FX, interest rate, counterparty and operational risk).

→ Slight increase in probability

2016 activities

Treasury slightly increased in 2016 and remains a major risk as Pearson has net debt of £1.1bn which periodically needs refinancing, and faces the possibility of the loss of cash balances in the event of a bank failure. Pearson also faces the possibility of losses due to changes in FX or interest rates adversely affecting the organisation.

However, the probability of a major issue is relatively low due to the spread of debt maturities, the cautious approach to counterparty credit risk and the strong liquidity position. Pearson finished the year with over £1bn of cash and sufficient access to funds to be able to repay its \$850 million in maturities in 2018 with the additional possibility of funds from the PRH disposal or recapitalisation.

The potential impacts of the UK's exit from the EU, such as market and FX volatility, were closely monitored throughout 2016 (which will continue in 2017).

2017 plans

During January 2017, the Group's credit ratings with Moody's and Standard and Poors were modified from Baa2/BBB (stable) to Baa2/BBB (negative outlook). This is not expected to restrict short-term capital market access if this was required.

In 2017, we will continue to operate in line with our treasury policy. More on this can be found in note 19, starting on p160.

Legal & compliance

12 Data privacy and information security

Risk of a data privacy incident or other failure to comply with data privacy regulations and standards; and/or a weakness in information security, including a failure to prevent or detect a malicious attack on our systems, could result in a major data privacy breach causing reputational damage and financial loss.

S Link to strategic goals
Develop digital & services

2016 activities

Risk concerning cyber security and data privacy remains high due to complex external factors, including increasingly sophisticated attack strategies, as well as Pearson's ongoing transition to digital products, services and cloud adoption. There are also upcoming increased regulatory obligations under the new EU data privacy law, the General Data Protection Regulation (GDPR), which will apply from May 2018 and introduce more onerous privacy obligations and more stringent penalties for non-compliance. The data privacy and information security offices worked together in 2016 on the bulletproofing and critical product programme to ensure that appropriate security and privacy controls are built in.

Data privacy

Actively worked to mitigate the risk through continued efforts on our privacy programme, in particular the roll-out of global policies and training, deploying new vendor and programme privacy impact assessment processes, and developing specialist privacy toolkits to help employees better manage privacy risks.

Controls

- › Established data privacy office
- › Data privacy policy and annual training
- › Monitoring by the Data Privacy Council
- › Privacy impact assessments in place.

Information security

The information security programme continued in 2016 to close gaps where risk has been identified, such as undertaking security impact assessments and putting in place remediation plans. Work continued towards global PCI compliance to avoid potential for severe fines and potential loss of contract revenue.

Controls

- › Established information security office
- › Up-to-date security policies and awareness training in place
- › Ongoing monitoring for potential malicious attacks on our infrastructure and systems
- › Ongoing firewall management activities
- › Automated security exception management
- › Vendor contract reviewed and approved for appropriate security controls.

2017 plans

The data privacy and information security improvement programmes that commenced in 2015 will continue throughout 2017 and will implement critical processes to drive best practices.

The joint activity on bulletproofing and critical products programme will continue, for example ensuring that the new global learning platform is 'secure by design'.

The data privacy programme will progress changes required to comply with the GDPR ready for it to take effect in May 2018. As Pearson operates across several EU Member States, Pearson will still need to comply with GDPR even when the UK leaves the European Union. The data privacy office will continue to monitor plans for the UK's departure from the EU and, if necessary, will adapt its privacy programme to take into account any new UK-specific privacy developments.

Principal risks and uncertainties

Legal & compliance

13 Intellectual property, including rights, permissions and royalties

Failure or lack of practical ability to adequately manage, procure, register, monitor, protect and/or properly license our intellectual property rights (including patents, trademarks and general copyright) in our brands, content and technology may prevent us from enforcing our rights against competitors' to protect our market share.

Failure to obtain permissions, or to comply with the terms of permissions, for copyrighted or otherwise protected materials such as photos resulting in potential litigation; risk of authors alleging improper calculations or payments of royalties.

S Link to strategic goals
Develop digital & services

2016 activities

In 2016, we rolled out the new Pearson brand with its protection greatly improved by expanding word mark protection to 80 new countries and filing for logo in 150 countries. A global brand database was also fully implemented to support this. The patent governance programme was revamped in 2016 and a stronger framework to protect intellectual property (IP) was established.

Work began in 2016 to evaluate new royalty and business practices. We also began to implement a global three-tier strategy guiding third-party assets (e.g. images, text, rich media) rights acquisition as well as a more stringent rights review and reclearance process.

Controls

- › Policies in place to manage and protect our intellectual property
- › Cooperation with trade associations
- › Monitoring of technology and legal advances
- › Patent programme in place.

2017 plans

We will continue to streamline our portfolios; procure and register expanded rights in our high-value IP globally, including aggressively expanding our patent portfolio; monitor activities and regulations; and proactively enforce our rights, taking necessary legal action.

In 2017, we will start to implement the newly developed royalty and business practices. A new rights management system is being developed for roll-out in the UK, US and Canada during 2017 and 2018.

14 Anti-bribery and corruption (ABC)

Failure to effectively manage risks associated with compliance to global and local ABC legislation.

S Link to strategic goals
Build market presence

2016 activities

Internal procedures and controls, including training, continue to improve, which should mitigate the impact as part of an 'adequate procedures' defence, in the event that an undetected ABC matter arises.

The audit committee reviewed the results of a self-assessment of the ABC programme, supplemented by internal audit and external independent review (see p72). Overall, this indicated an effective framework to be in place.

Pearson's ABC infrastructure includes a network of local compliance officers based in country, being mainly members of the legal team. These officers have assumed responsibility for ABC compliance in their respective businesses, and function as the 'eyes and ears' of the organisation with the oversight of the central compliance and legal teams.

In addition to ongoing face-to-face training for higher risk groups, a compliance awareness campaign took place in December 2016 which included ABC, to coincide with UN International Anti-Corruption Day. ABC certification was rolled out across all higher risk markets in 2016.

Controls

- › Policy and guidance updated, although no change to Pearson's 'zero tolerance' principle
- › Code of Conduct certification and training in place, which includes a clear statement of ABC policy
- › Business Partner Code of Conduct, emphasising ABC compliance
- › Local Compliance Officer programme in place and proving successful.

2017 plans

Continue risk assessments in 2017 to ensure that the ABC programme continues to reflect local market and business model risks.

Further develop and deploy risk-based third-party due diligence and monitoring.

Leverage The Enabling Programme's systems and processes to automate and embed improved preventive and detective controls relevant to ABC.

Legal & compliance

15 Competition law

Failure to comply with anti-trust and competition legislation could result in costly legal proceedings and/or adversely impact our reputation.

S Link to strategic goals
Build market presence

2016 activities

A policy, general training plus supporting guidance were developed in 2016, containing all the measures, indicators and actions required to ensure anti-trust and competition compliance.

Controls

- › Policy and guidance published
- › Lawyer network launched across Pearson
- › Ongoing training and awareness initiatives.

2017 plans

Employee training will continue throughout 2017 and risk assessments are ongoing to monitor compliance with anti-trust and competition legislation.

Risk assessment of prospects and viability

This section should be read together with the full viability statement on p107.

Pearson's principal risks and our ability to manage them as outlined in this section are linked to our viability as a company. These risks have therefore been taken into account when preparing the viability statement.

The board assessed the prospects of the company over a three-year period, longer than the minimum 12 months of the annual going concern review. The three-year period corresponds with Pearson's strategic planning process and represents the time over which the company can reasonably predict market dynamics and the likely impact of additions to the product portfolio.

The board discusses the company's strategic plan on an annual basis taking account of a range of factors including market conditions, the principal risks to the Group, product and capital investment levels, as well as available funding. Pearson's strategy and business model are discussed in more detail on p10-27.

The key assumptions which underpin our three-year strategic plan to December 2019 are as follows:

1. There are further declines in enrolments and other downwards pressures in the US higher education courseware market.
2. The 2016 inventory correction with key channel partners partially unwinds.
3. There is increased investment in the product technology platform to accelerate the shift to digital and enhance courseware service capabilities.
4. Increased participation in the courseware rental market is seen.
5. US state testing revenues continue to decline through 2017, as current contracts unwind, before stabilising by the end of the year.
6. The remaining Pearson businesses perform broadly in line with trends seen in 2016 for the next year before returning to modest growth.

In assessing the company's viability for the three years to December 2019, the board analysed a variety of downside scenarios including a scenario where the company is impacted by all principal risks from 2016. The primary modelling overlaid a 'severe but plausible' downside scenario onto the base

case strategic plan for the Group, focusing on the impact of the following assumptions and key risks:

- › Further declines in enrolments and further channel disruption in US higher education courseware
- › Failure to accelerate our shift to digital while continuing to invest in global products and services
- › Increased competition from new entrants in School and higher education courseware and higher education online services
- › Pricing pressures due to rental impacting higher education courseware
- › Revenue shortfalls in growth markets driven by weaker local economic conditions and rationalisation.

The board also stress-tested the impact on our liquidity of all the principal risks listed above occurring together. Although this is not regarded as a plausible scenario, the test showed that the company would still have liquid resources subject to a limited number of management actions.

The board's confirmation of Pearson's viability for the three years to 2019, based on this assessment, is included alongside the going concern statement on p107.