2020 Half Year Results

Data Appendix

Foreign exchange

Rolls-Royce hedges transactional FX

- Transactional exposure arises when revenue currencies differ from cost currencies
- Achieved rate is not typically affected by short-term spot rate movements unless new cover is taken; this impact is usually diluted
- $26.2 billion GBP:USD hedge book
- Hedge book average rate is £/$1.52
- $5.6 billion EUR:USD hedge book
- Hedge book average rate is €/$1.25

Rolls-Royce does not hedge against the impact of translational FX

- Translational exposure varies by source of revenues and profits
- Translational FX impact is driven by period average spot rates
- Translational impact increases as rate reduces

Translational impact of 0.01 unit of currency change in period average rates

	Revenue	Profit
USD	~£8 million	~£2 million
EUR	~£17 million	~£0 million

Foreign exchange:
Translational impact

The impact of translational foreign exchange is driven by period average spot rates

2020 vs. 2019 £m	EXPOSURE Revenue	EXPOSURE Profit	REVENUE IMPACT Inc FX	REVENUE IMPACT FX	UNDERLYING OPERATING PROFIT IMPACT Inc FX	UNDERLYING OPERATING PROFIT IMPACT FX
Group			5,561	32	(1,669)	9
Civil Aerospace	USD, EUR	USD, EUR	2,527	5	(1,826)	5
Power Systems	EUR, USD	EUR, USD	1,250	2	22	-
Defence	USD	USD	1,553	23	210	4
ITP	EUR, USD	EUR, USD	346	1	10	-
Non-core/Other*	NOK, EUR, USD	EUR, USD	(115)	1	(85)	-

Period average rates	**2020**	2019
USD	1.26	1.29
EUR	1.14	1.15

*Includes Bergen, Civil Nuclear and other smaller businesses and intersegment eliminations

Decisive action taken to reduce the size of our USD hedge book

- Deterioration in the medium-term outlook caused by COVID-19
- Action taken to reduce the size of the hedge book by $10.3bn to match forecast of lower USD receipts in the coming years
- Resulting in cash costs of £1.46bn between 2020-2026
- GBP:USD hedge book now is $26.2bn with an average rate of **$1.52**
- Extends out to 2028 with high cover level until 2026
- Continue to monitor expected USD receipts as the recovery becomes clearer

Cash costs related to our $10.3bn hedge book reduction

2020	2021	2022	2023	2024	2025	2026	Total
£88m	£324m	£327m	£718m total across 2023-26				£1.46bn

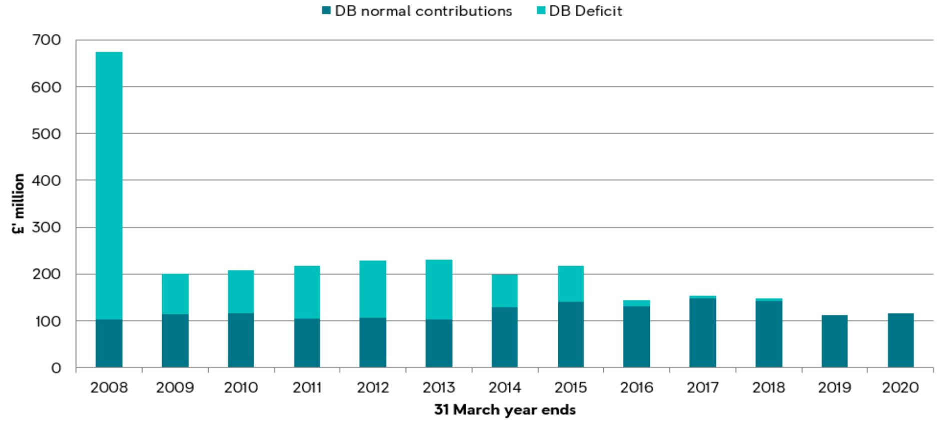
Pensions HY20

UK Plan continues to have a strong surplus

£1.7bn

Rolls-Royce UK Pension Fund

- 77% of gross liabilities and 91% of gross assets
- £10bn of assets (£8.3bn UK liabilities) and surplus of £1.7bn (IAS 19 basis).
- 90% of assets in low risk investments to match liabilities - key to protecting our funding position in low yield environment
- Closed to new hires since 2007
- Next statutory funding valuation due as at 31 March 2020. Current agreement with trustees has lowered future service cost.
- Cash contributions (company year):
  2018 £117m
  2019 £199m (includes L&G payment for pensioner transfer)
  2020 £6m (contributions currently deferred until October by agreement with Trustee)



Overseas plans

- 23% of gross liabilities and 9% of gross assets
- Deficit of £1,465m (IAS 19 basis) principally made up of
  - unfunded US healthcare/funded pension plans (£522m) and
  - German unfunded pension plans (£899m)
- Cash contributions:
  2018 £64m
  2019 £67m
  HY 2020 £32m (£66m projected)

*IAS 19 reporting basis discounts liabilities using a AA bond rate – while this is the required reporting method it does not match the method used to manage and fund the UK plan - which discounts liabilities using a curve to aligned to its Liability Driven Investments (gilt based). This significantly reduces the real funding volatility relevant for cash funding purposes rather than that shown by the IAS19 valuations

Trent 1000:

£0.3bn improvement in in-service costs

H1 2020 in-service cash costs: **£135m**

Trent 1000 exceptional charges

2018	**£(790)m**
2019	**£(1,361)m**
2020	**+£498m**
Total charges	**£(1,653)m**

- **£0.3bn reduction to in-service costs:** good progress on the roll-out of fixes (supported by lower flying hours as a result of COVID-19) led to a reduction in AOGs to zero in June
- **£0.2bn improvement in expected contract losses on certain loss-making contracts**

- Total in-service cash costs 2017-23 now expected to be **~£2.1bn** (previously ~£2.4bn)
- **£1.2bn** incurred to-date (net of insurance)
- **~£1bn** remaining in-service cash costs until 2023, with **£450-£550m** expected in FY 2020, reducing thereafter
- Remaining provisions of **£0.6bn** to cover these costs, with the remainder expected to be traded through underlying P&L

Increased level of one-time charges due to COVID-19

Reported results include £(933)m of non-underlying operating profit charges

£1.46bn hedge book reduction charge only impacts underlying results (headline results already include "mark-to-market" of the hedge book)

	Underlying Transactional FX flows are recorded at **achieved** hedge rates; the mark-to-market of the hedge book and any exceptional items are **excluded**	Headline Transactional FX flows are recorded at **spot** FX rates, non-cash mark-to-market of the hedge book is **included** within results
Revenue	**£(866)m** LTSA catch-up to reflect lower expected future flying hours, and aircraft parking and retirement risk	**£(866)m** LTSA catch-up to reflect lower expected future flying hours, and aircraft parking and retirement risk
Operating Profit	**£(1,218)m total, including:** • £(814)m profit impact of LTSA catch-ups (difference to £(866)m revenue impact due to RRSP share) • £(309)m increase in expected losses on certain loss-making contracts • £(95)m specific customer provisions	**£(2,150)m total**, including **£(1,218)m** underlying charges and **£(933)m** total non-underlying items: • £(1,065)m impairments and other write-offs to reflect the impact of COVID-19 on the Group's cash flow forecasts • +£498m reduction in Trent 1000 exceptional provisions • £(366)m exceptional restructuring
Profit before tax	**£(1,457)m** up-front recognition of future FX cash settlement costs in order to reduce the size of our USD hedge book by $10.3bn (£88m cash cost in H1)	**£(2,631)m** non-cash impact of hedge book mark-to-market (GBP:USD rate moved from 1.32 at 31 Dec 2019 to 1.23 at 30 June 2020)

Civil engine deliveries

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	H1 2020
By engine																		
RB211 22B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RB211 524	2	5	7	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0
RB211 535	14	6	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
RB211 Total	**16**	**11**	**7**	**2**	**5**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Trent 500	88	115	88	97	45	45	57	16	1	8	0	0	0	0	0	0	0	0
Trent 700	35	30	54	59	75	88	125	139	135	157	181	184	140	88	110	63	10	0
Trent 800	30	15	21	25	10	7	9	0	0	0	0	0	0	0	0	0	0	0
Trent 900				20	10	48	33	30	70	64	42	35	6	30	67	44	34	8
Trent 1000									18	46	59	79	106	122	109	125	126	48
Trent XWB-84												13	56	117	196	184	178	51
Trent XWB-97															1	45	56	22
Trent 7000																8	106	8
Trent	**153**	**160**	**163**	**201**	**140**	**188**	**224**	**185**	**224**	**275**	**282**	**311**	**308**	**357**	**483**	**469**	**510**	**137**
Civil Large Engines	**169**	**171**	**170**	**203**	**145**	**193**	**225**	**185**	**224**	**275**	**282**	**311**	**308**	**357**	**483**	**469**	**510**	**137**
Tay	48	43	55	66	80	92	68	51	57	60	67	46	38	28	2	0	0	0
AE3007	217	242	168	113	135	135	32	55	31	43	78	48	34	20	8	10	4	0
BR700	96	131	161	155	183	216	172	184	232	290	326	334	332	244	190	205	191	68
Pearl 15																2	22	31
Pearl 700																	2	4
Civil Small Engines	**361**	**416**	**384**	**334**	**398**	**443**	**272**	**290**	**320**	**393**	**471**	**428**	**404**	**292**	**200**	**217**	**219**	**103**
V2500*	216	237	327	319	308	351	347	371	418	220	0	0	0	0	0	0	0	0
Civil Total	**746**	**824**	**881**	**856**	**851**	**987**	**844**	**846**	**962**	**888**	**753**	**739**	**712**	**649**	**683**	**686**	**729**	**240**

* V2500 deliveries are recorded until the sale of Rolls-Royce's stake in International Aero Engines on 29th June 2012

Civil engine active in-service fleet**

Fleet data from Cirium excludes aircraft **temporarily parked** due to COVID-19

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	**2019**	**H1 2020**
By engine																		
RB211 22B	48	36	36	12	15	9	12	9	6	6	3	3	3	3	3	3	3	3
RB211 524	829	815	796	791	769	706	643	638	617	530	455	352	302	278	266	242	210	74
RB211 535	1,154	1,192	1,168	1,174	1,158	1,102	1,078	1,056	1,052	1,028	1,026	1,012	908	868	826	850	824	560
RB211 Total	**2,031**	**2,043**	**2,000**	**1,977**	**1,942**	**1,817**	**1,733**	**1,703**	**1,675**	**1,564**	**1,484**	**1,367**	**1,213**	**1,149**	**1,095**	**1,095**	**1,037**	**637**
Trent 500	120	212	292	380	412	432	464	492	480	452	440	388	352	336	280	284	240	96
Trent 700	234	264	306	364	422	492	590	696	816	948	1,114	1,288	1,388	1,460	1,590	1,636	1,606	988
Trent 800	376	392	406	430	444	442	448	450	444	446	436	422	362	352	330	334	320	96
Trent 900	0	0	0	0	4	36	60	80	140	208	244	280	304	332	360	400	428	24
Trent 1000	0	0	0	0	0	0	0	0	6	44	84	164	260	384	476	546	658	454
Trent XWB-84	0	0	0	0	0	0	0	0	0	0	0	2	30	124	278	432	590	470
Trent XWB-97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	70	76
Trent 7000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	80	52
Trent	**730**	**868**	**1,004**	**1,174**	**1,282**	**1,402**	**1,562**	**1,718**	**1,886**	**2,098**	**2,318**	**2,544**	**2,696**	**2,988**	**3,314**	**3,662**	**3,992**	**2,256**
Civil Large Engines	**2,761**	**2,911**	**3,004**	**3,151**	**3,224**	**3,219**	**3,295**	**3,421**	**3,561**	**3,662**	**3,802**	**3,911**	**3,909**	**4,137**	**4,409**	**4,757**	**5,029**	**2,893**
Spey	1,090	1,024	992	946	914	864	802	760	702	632	580	506	460	430	404	360	284	264
Tay	1,599	1,572	1,623	1,755	1,769	1,825	1,861	1,869	1,917	1,969	2,019	2,011	2,035	2,027	1,993	2,009	1,946	1,898
AE3007	1,934	2,164	2,328	2,458	2,564	2,520	2,528	2,562	2,550	2,544	2,598	2,534	2,468	2,326	2,302	2,448	2,472	1,968
BR700	864	990	1,144	1,272	1,446	1,560	1,752	1,910	2,128	2,362	2,696	2,964	3,388	3,642	3,858	4,098	4,322	4,248
Pearl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Civil Small Engines	**5,487**	**5,750**	**6,087**	**6,431**	**6,693**	**6,769**	**6,943**	**7,101**	**7,297**	**7,507**	**7,893**	**8,015**	**8,351**	**8,425**	**8,557**	**8,915**	**9,024**	**8,392**
V2500*	930	1,054	1,196	1,348	1,492	1,613	1,722	1,852	2,002	0	0	0	0	0	0	0	0	0
Civil Total	**9,178**	**9,715**	**10,287**	**10,930**	**11,409**	**11,601**	**11,960**	**12,374**	**12,860**	**11,169**	**11,695**	**11,926**	**12,260**	**12,562**	**12,966**	**13,672**	**14,053**	**11,285**
Fleet growth	**8%**	**6%**	**6%**	**6%**	**4%**	**2%**	**3%**	**3%**	**4%**	**-13%**	**5%**	**2%**	**3%**	**2%**	**3%**	**5%**	**3%**	**-20%**

* 50% of the total V2500 fleet included

** In-service stalled engine base is net of retirements and excludes aircraft which are parked.

Civil active in-service thrust base (millions lbs)**

Fleet data from Cirium excludes aircraft **temporarily parked** due to COVID-19

By engine	Thrust per engine (lbs)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	H1 2020
RB211 22B	60,000	3	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
RB211 524	60,000	50	49	48	47	46	42	39	38	37	32	27	21	18	17	16	15	13	4
RB211 535	40,000	46	48	47	47	46	44	43	42	42	41	41	40	36	35	33	34	33	22
RB211 Total		**99**	**99**	**97**	**95**	**93**	**87**	**82**	**81**	**79**	**73**	**69**	**62**	**55**	**52**	**49**	**49**	**46**	**27**
Trent 500	56,000	7	12	16	21	23	24	26	28	27	25	25	22	20	19	16	16	13	5
Trent 700	72,000	17	19	22	26	30	35	42	50	59	68	80	93	100	105	114	118	116	71
Trent 800	92,000	35	36	37	40	41	41	41	41	41	41	40	39	33	32	30	31	29	9
Trent 900	70,000	0	0	0	0	0	3	4	6	10	15	17	20	21	23	25	28	30	2
Trent 1000	71,000	0	0	0	0	0	0	0	0	0	3	6	12	18	27	34	39	47	32
Trent XWB-84	84,000	0	0	0	0	0	0	0	0	0	0	0	0	3	10	23	36	50	40
Trent XWB-97	97,000														0	0	3	7	7
Trent 7000	72,000														0	0	0	6	4
Trent		**58**	**67**	**76**	**87**	**95**	**103**	**114**	**125**	**137**	**152**	**168**	**185**	**196**	**217**	**243**	**270**	**297**	**170**
Civil Large Engines		**157**	**166**	**172**	**182**	**188**	**190**	**196**	**206**	**216**	**226**	**237**	**247**	**251**	**269**	**292**	**319**	**343**	**197**
Spey	11,000	12	11	11	10	10	10	9	8	8	7	6	6	5	5	4	4	3	3
Tay	15,000	24	24	24	26	27	27	28	28	29	30	30	30	31	30	30	30	29	28
AE3007	7,500	15	16	17	18	19	19	19	19	19	19	19	19	19	17	17	18	18	15
BR700	15,000	13	15	17	19	22	23	26	29	32	35	40	44	51	55	58	61	65	64
Pearl	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Civil Small Engines		**63**	**66**	**70**	**74**	**78**	**79**	**82**	**84**	**88**	**91**	**97**	**99**	**105**	**107**	**109**	**114**	**116**	**110**
V2500*	27,500	26	29	33	37	41	44	47	51	55	0	0	0	0	0	0	0	0	0
Civil Total		**246**	**261**	**275**	**294**	**306**	**313**	**326**	**341**	**359**	**317**	**333**	**346**	**356**	**376**	**402**	**433**	**459**	**307**
Thrust Growth		**9%**	**6%**	**6%**	**7%**	**4%**	**2%**	**4%**	**5%**	**5%**	**-12%**	**5%**	**4%**	**3%**	**6%**	**7%**	**8%**	**6%**	**-33%**

* 50% of the total V2500 fleet included

** Inservice stalled engine base is net of retirements and excludes aircraft which are parked.

Defence engine deliveries

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	H1 2020
Transport	265	289	305	296	239	266	286	323	311	262	112
Helicopters	343	412	438	479	418	307	278	226	213	200	67
Combat	102	103	113	108	81	69	74	38	23	27	14
Trainers/Other	0	10	8	10	6	7	23	18	13	10	16
Total	**710**	**814**	**864**	**893**	**744**	**649**	**661**	**605**	**560**	**499**	**209**

Civil revenues by engine type

£m	HY 2020	HY 2019	Change %
Original Equipment	**1,198**	**1,570**	**-24%**
Large Engine	862	1,226	-30%
Business aviation	329	330	0%
V2500	7	14	-50%
Service	**1,329**	**2,448**	**-46%**
Large Engine	649	1,595	-59%
Business aviation	207	261	-21%
Regional	126	163	-23%
V2500	347	429	-19%
TOTAL	**2,527**	**4,018**	**-37%**

Decline in service revenues includes £(866)m LTSA catch-up impact