



BRIEFING PAPER

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Briefing for debate on 'National Productivity'

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This briefing has been produced in advance of the Westminster Hall debate on 'National Productivity' to be held at 9.30am on Wednesday 22 January 2020.

A more detailed Library briefing "[Productivity in the UK](#)" (last updated in September 2017) is also available.

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1. Latest UK data

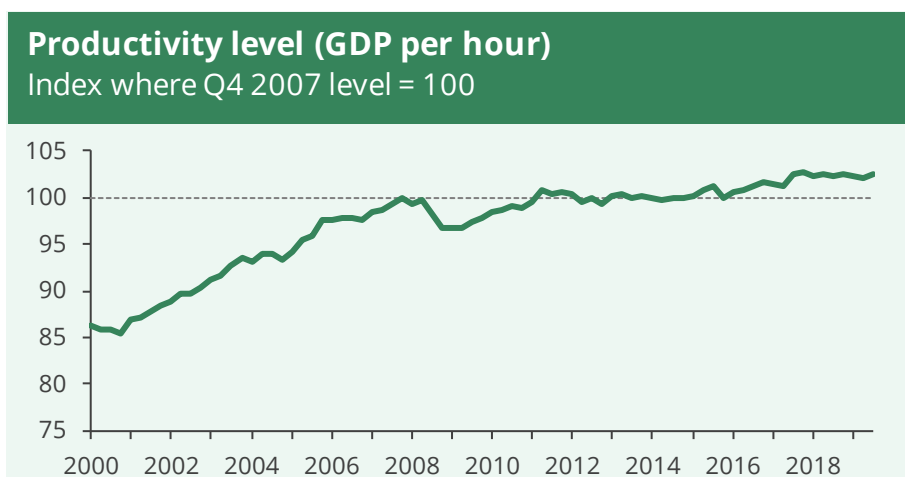
Productivity rose by 0.4% in Q3 2019 compared with the previous quarter.¹ It was only 0.1% higher compared with a year ago (Q3 2018). The slight pick-up in quarterly growth should not obscure the continued weakness in the overall trend.

Historically, UK labour productivity has grown by around 2% per year but since the 2008/2009 recession it has stagnated. The level of labour productivity in Q3 2019 was only 2.4% above what it was over 11 years earlier in Q4 2007 (the pre-recession peak level).

Further analysis is contained in the latest Office for National Statistics (ONS) [productivity release](#).

Productivity, output (GDP) per hour		
	% change on qtr	% change on yr
2017	..	0.9
2018	..	0.5
2018 Q4	0.3	-0.1
2019 Q1	-0.4	-0.1
Q2	-0.2	-0.6
Q3	0.4	0.1

Source: ONS series TXBB, LZVD



You can find time series data from the ONS at the following links:

- Quarterly data, [% change compared with the previous quarter](#)
- Quarterly data, [% change compared with the same quarter one year before](#)
- Quarterly data, [productivity level](#)

2. Reasons for the productivity stagnation

The Office for National Statistics (ONS) has in the past described the persistent weakness in productivity since the 2008/09 recession as “unprecedented in the post-war period”.² It is also arguably the most important economic development since the financial crisis.³

Growth in productivity is the essential ingredient in rising living standards over the long term: if we can produce more in the same amount of time, this frees up resources in the economy to do other things. As growth in wages and growth in productivity are closely linked, this has led to the poor performance of average wages in the past decade.⁴

¹ ONS, [Labour productivity, UK: July to September 2019](#), January 2020

² ONS, [Labour Productivity, Q4 2014](#), Apr 2015

³ Library Insight, “[Slowing economic growth, Brexit and the productivity challenge](#)”, 15 January 2020

⁴ This link is neatly summarised in analysis by the Low Pay Commission (March 2014), *The Future Path of the National Minimum Wage 2014*, [paragraphs 67-72](#); also see the Resolution Foundation report, “[Count the pennies: Explaining a decade of lost pay growth](#)” (October 2018)

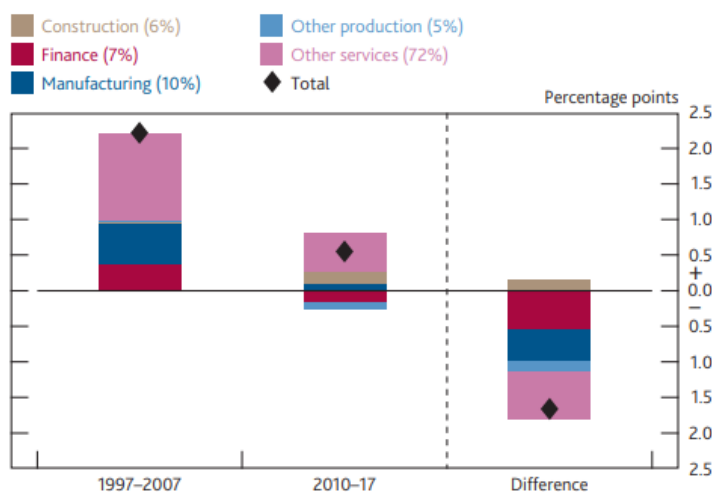
A number of possibilities for this stagnation in productivity have been offered over the years, including:

- falling productivity in the oil and gas, manufacturing and financial sectors;
- weakness in investment that has reduced the quality of equipment employees are working with;
- the banking crisis leading to a lack of lending to more productive firms;
- employees within firms being moved to less productive roles;
- slowing rates of innovation and discovery;
- an ageing population;
- inaccuracies in the data.⁵

As time has gone on and productivity growth rates have failed to rebound, some of these explanations seem more likely – or perhaps more important – than others. For example, approximately half of the productivity slowdown is accounted for by the manufacturing and finance sectors, as illustrated by this chart from the Bank of England:⁶

Chart 3.7 Finance and manufacturing account for over half of the post-crisis weakness in productivity growth

Contributions to hourly labour productivity growth^(a)



Sources: ONS and Bank calculations.

(a) Annual averages. Sectoral output per hour is calculated as gross value added (GVA) divided by hours worked. Figures in parentheses are shares in nominal GVA in 2017.

⁵ More detailed analysis of the causes of the UK's productivity puzzle can be found in "[Productivity puzzles - speech by Andy Haldane](#) (Bank of England Chief Economist)", 20 March 2017, Barnett, A, Batten, S, Chiu, A, Franklin, J and Sebasti a-Barriel, M (2014), "[The UK productivity puzzle](#)", *Bank of England Quarterly Bulletin 2014 Q2*, while an overview of the issues is provided in *Financial Times*, "[Weighing up four theories on the UK's productivity gap](#)", 19 April 2015

⁶ Bank of England, [Inflation Report November 2018](#), pp22-23 summarising Speech by Silvana Tenreiro, Bank of England Monetary Policy Committee member, [The fall in productivity growth: causes and implications](#) (January 2018)

Research by the Bank of England has also discovered that the slowdown in productivity growth can be largely be attributed to the most productive firms not improving as fast as they used to.⁷ In other words, while these firms are still more productive than others, the rate at which their productivity has *grown* in recent years is slower than in the past.

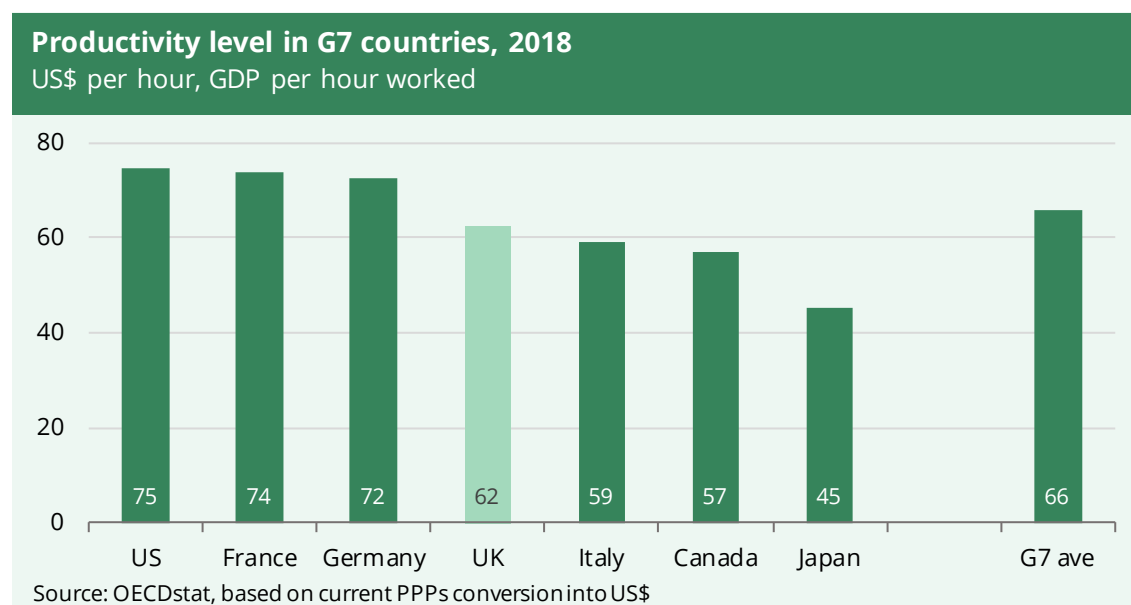
Looking ahead, most economic forecasters do anticipate productivity growth to improve in upcoming years, although only to around half of historic norms – typically to around 1%, or just over 1%, per year.⁸

3. International Comparisons

The figures given in this section (from the OECD) may be slightly different to those provided above (from the ONS).

3.1 Productivity levels

The chart below shows labour productivity levels (GDP per hour worked) for the G7 countries, based on [OECD data](#). It shows that the US has the highest labour productivity level in 2018 at \$75 per hour worked, followed closely by France (\$74) and then Germany (\$72). The UK is in the “middle of the G7 pack” at \$62, which is 16% below the US and French levels and 14% below Germany’s.



Data for all OECD countries are available from this [link to a custom-made table of OECD data](#).

3.2 Productivity growth

The figures above show the *levels* of labour productivity. These don't tend to change a great deal from year to year. However, productivity *growth* from one year to the next is also important. 2019 data are not yet available, but the table below provides data for recent previous years.

⁷ BankUnderground (Bank of England staff blog), The UK's productivity puzzle is in the top tail of the distribution, March 2018; summarised by Chris Giles, Financial Times economics editor, in "[UK's biggest companies are productivity slackers](#)", 24 May 2018

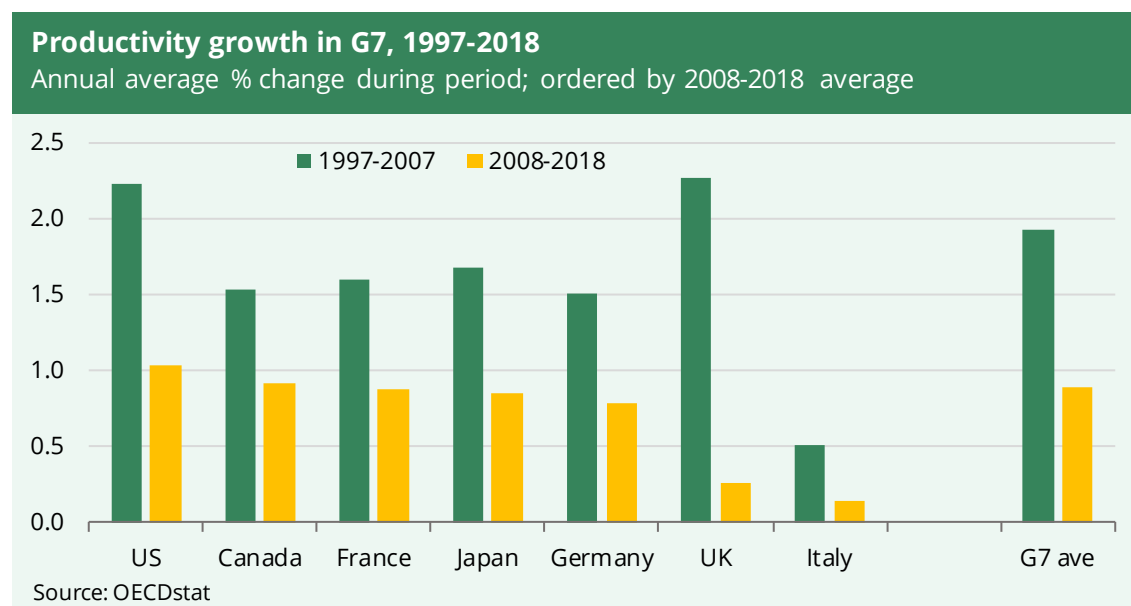
⁸ For example, see Office for Budget Responsibility, [Economic and fiscal outlook](#), March 2019, p33

Productivity growth in G7 economies since 2015				
Annual % change in real GDP per hour worked				
	2015	2016	2017	2018
UK	1.7	-0.5	1.0	0.5
US	0.8	0.2	1.3	1.0
Germany	0.8	1.4	1.3	0.3
France	0.8	0.3	2.4	1.4
Italy	0.1	-0.3	0.7	-0.3
Japan	1.4	-0.1	1.2	0.5
Canada	-0.3	0.3	1.9	-0.1
G7	1.0	0.3	1.3	0.8

Source: OECDstat

Data for all OECD countries are available from this [link to a custom-made table of OECD data](#).

UK productivity growth has been weak in recent years, continuing the trend seen since the global financial crisis. This trend has also been seen across advanced economies, although the magnitude of the slowdown in the UK is particularly stark: from one of the highest productivity growth rates in the G7 to one of the lowest, as the chart below illustrates.⁹



3.3 Data

The underlying data for all the tables and charts above plus additional figures for all OECD countries (broken down into G7, EU and non-EU countries) going back to 1990 for productivity levels and annual growth rates are provided in the accompanying Excel file on the [landing page of this briefing](#).

⁹ Data from OECDstat, [custom data table available here](#)

Please note that for the productivity levels table you should read this vertically, i.e. compare countries in each year, and not across time as this is not the preferred measure for productivity growth.

You can also find these figures (back to 1970) from the original source from these custom tables created at OECDstat:

- [Annual productivity growth](#)
- [Productivity levels](#) (you should read this table vertically, i.e. compare countries in each year, and not across time as this is not the preferred measure for productivity growth)

4. Regional data

Data for regional productivity levels - defined as economic output per hour worked – in the UK are available up to 2017 (new 2018 data is scheduled for release in early February 2020) and are based on a measure of economic output very similar to GDP (Gross Value Added) divided by the total number of hours worked.

London has the highest level of productivity of any region or country in the UK, 30% higher than the UK average in 2017. The only other region with productivity above the UK average in 2017 was the South East (7% above the UK). The table below shows how each region and country of the UK compares against the UK average level of productivity.¹⁰

Regional comparisons of UK productivity, 2017	
% difference compared with UK productivity level	
	% difference in productivity level vs UK average
London	+30%
South East	+7%
Scotland	-1%
East	-5%
South West	-8%
North West	-9%
North East	-11%
West Midlands	-11%
Yorkshire & Humber	-13%
East Midlands	-14%
Northern Ireland	-16%
Wales	-16%

Productivity is economic output per hour worked
Economic output is based on Gross Value Added (GVA)
Source: ONS dataset, Regional productivity time series, Jul 2019

Figures on this basis, comparing regional productivity levels with the UK average, are available back to 1997. These are provided in the accompanying Excel file available on the

¹⁰ ONS dataset, [Regional productivity time series](#), Jul 2019

[landing page of this briefing](#). Alternatively, data back to 2000 is available from the [metrics section](#) of the Industrial Strategy Council website (and, of course, the [source data](#) from the ONS).

Further analysis on regional and sub-regional productivity is provided in the ONS's annual release from February 2019, [Regional and sub-regional productivity in the UK](#) and the accompanying [Industry by region estimates of labour productivity: 2017](#). Please note the figures in these publications may be slightly different to the ones provided above, which have been revised since they were published.

5. Government policy

5.1 Industrial Strategy

The Government's main vehicle for productivity policy is its 'industrial strategy'. This was published by Theresa May's Government in a White Paper, [Building a Britain fit for the future](#), on 27 November 2017.

The industrial strategy emphasises what it describes as the 'five foundations of productivity': ideas, people, infrastructure, business environment and places.¹¹ Government policies that seek to address these "essential attributes" of a successful economy are addressed through the industrial strategy. These include targets for R&D spending, infrastructure, skills policy and 'sector deals' for specific industries.

For more information see the Library briefing paper [Industrial strategy](#) (August 2019).

National Productivity Investment Fund

At the November 2016 Autumn Statement the then Chancellor, Philip Hammond, announced the creation of the National Productivity Investment Fund (NPIF). This is now a key part of the Government's industrial strategy's commitment to upgrading the nation's infrastructure.

Over the course of the seven years from 2017/18 to 2023/24, the Government has allocated £37 billion in spending for the NPIF to be spread across four main areas: housing, transport, digital communications, and research and development (R&D).¹² The Government stated, at the time of its creation, that the NPIF will provide support for the following:

1. accelerate new housing supply
2. tackle congestion on the roads and ensure the UK's transport networks are fit for the future
3. support the market to roll out full-fibre connections and future 5G communications, delivering a step change in broadband speed, security, and reliability
4. enhance the UK's position as a world leader in science and innovation¹³

The table below, reproduced from the most recent Budget in October 2018, gives breakdowns of the funding allocations:¹⁴

¹¹ HM Government, [Industrial Strategy: Building a Britain fit for the future](#), Nov 2017, pp14-16

¹² HM Treasury, [Autumn Statement 2016](#), Cm9362, Nov 2016, pp25-34

¹³ HM Treasury, [Autumn Statement 2016](#), Cm9362, Nov 2016, p26, para 3.8

¹⁴ HM Treasury, [Budget 2018](#), HC 1629, Oct 2018, p54

Table 4.1: National Productivity Investment Fund (£ million)¹

	2017-18	2018-19	2019-20	2020-21	2021-22 ²	2022-23 ²	2023-24 ²
Housing							
Accelerated Construction	0	345	170	200	–	–	–
Affordable Housing	495	605	1,215	610	–	–	–
Housing Infrastructure Fund	0	355	1,165	1,140	1,070	1,190	1,590
Small sites infrastructure and remediation	0	275	355	120	–	–	–
Land Assembly Fund	0	0	220	355	355	355	–
Transport							
Roads and local transport	365	360	290	415	90	90	–
Next generation vehicles	75	145	155	115	–	–	–
Digital railway enhancements	30	55	165	285	–	–	–
Cambridge – Milton Keynes – Oxford Arc	5	135	0	0	–	–	–
Transforming Cities Fund	0	140	355	485	1,010	910	–
Future High Streets Fund	0	0	5	75	220	240	195
Tyne & Wear Metro	0	0	25	35	265	–	–
Digital Infrastructure							
Fibre and 5G investment	25	150	275	290	–	–	–
Research and Development							
Research and Development funding	425	820	1,520	2,000	2,325	–	–
Total	1,420	3,385	5,915	6,125	6,955	6,500	7,250

¹ Gross costs are presented on a UK basis.

² Further allocations will be made at future fiscal events.

Source: HM Treasury calculations

5.2 Conservative Party manifesto 2019 and March 2020 Budget

The Conservative Party manifesto for the December 2019 General Election included a commitment to increase infrastructure investment, funding for regeneration and a new skills funding initiative.¹⁵

In announcing the date of the Budget for 11 March 2020, the Treasury emphasised its commitment to additional investment and spending on public services.¹⁶

In January 2020, BEIS Minister Lord Duncan, responding to a written parliamentary question on the UK's weak productivity growth summarised some policy developments in this area (hyperlinks have been added):

[...] Productivity is the main driver of long-run economic growth. The UK's ability to improve living standards is almost entirely dependent on its ability to raise productivity. In 2017 the Government published a document on the [Industrial Strategy](#) that set out a long-term plan to boost productivity by backing businesses to create good jobs and increase the earning power of people throughout the UK with investment in skills, industries and infrastructure. The Government recently published the [Business Productivity Review](#) in response to the Industrial Strategy's core priority of addressing the UK's productivity issue.

Furthermore, the [Industrial Strategy Council](#) – an independent, non-statutory advisory group comprised of leading men and women from business, academia and civil

¹⁵ [The Conservative and Unionist Party Manifesto 2019](#)

¹⁶ HM Treasury press release, "[Chancellor launches Budget process to usher in 'decade of renewal'](#)", 7 Jan 2020

society – was created to provide impartial and unbiased evaluation of the Government’s progress in delivering the Industrial Strategy. The Council [published its success metrics](#) on its website in Autumn 2019.¹⁷

Further information on the current state of infrastructure in the UK, recent Government policies and levels and sources of investment is provided in the Library briefing paper [Infrastructure policies and investment](#) (December 2019).

6. Sources of information

Below are some sources of information and research related to UK productivity.

Commons Library

- Library briefing, [Productivity in the UK](#) (last updated in September 2017)
- Library Insight, [Slowing economic growth, Brexit and the productivity challenge](#) (January 2020)
- Library briefing, [Industrial strategy](#) (August 2019)
- Library briefing, [Infrastructure policies and investment](#) (December 2019)
- Library website, [The UK economy: a dashboard](#) (latest data)
- Library statistical briefing, [Regional and National Economic Indicators](#) (December 2019)

Other research/reports

- Office for National Statistics (ONS), [Productivity statistical bulletin](#) (January 2020)
- ONS analysis, [“The productivity puzzle and the lost potential £5,000 in wages”](#) (July 2019)
- ONS, [International comparisons of productivity - summarising new OECD research](#) (January 2019)
- Bank of England Staff Working Paper No. 818, [The impact of Brexit on UK firms](#) (includes productivity estimates), August 2019 and [summary article](#)
- CBI, [Great Job: Solving the productivity puzzle through the power of people](#) (May 2019)
- Business, Energy and Industrial Strategy Committee, [Small businesses and productivity inquiry](#) (November 2018) and Government response (March 2019)
- Bank of England staff blog, [The UK’s productivity puzzle is in the top tail of the distribution](#) (March 2018)
- Speech by Silvana Tenreyro, Bank of England Monetary Policy Committee member, [The fall in productivity growth: causes and implications](#) (January 2018)
- Prof Nicholas Crafts, [The Postwar British Productivity Failure](#), University of Warwick (November 2017)
- OECD, [Economic Survey of the UK](#), includes analysis of regional productivity differences (October 2017)

Resources

- Department for Business, Energy & Industrial Strategy (BEIS), [Industrial Strategy](#)

¹⁷ PQ [HL104 \[on Productivity\]](#), 16 Jan 2020

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- BEIS, [Business Productivity Review](#)
- [Industrial Strategy Council](#)
- [Be the Business](#) (originally a government-commissioned [review](#) looking at how businesses could improve their productivity)

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