

US PRODUCTIVITY SHOWS SOLID GAINS IN Q3 BUT LONGER TREND REMAINS WEAK

**US real nonfarm business productivity rose by 3.1% q/q in Q3 due to strong Q3 GDP growth, but was flat on a year-on-year basis*

**Unit labor costs, which measures compensation per unit of output rose by only 0.3% q/q, but remained in its recent 2.3-2.7% year-on-year range*

**Real compensation jumped in the quarter, but its yr/yr trend is a soft rise as wages remain constrained by low productivity*

**Low productivity growth will lead to shallow path of Fed interest rate increases*

US real nonfarm business productivity (output per hour worked) rose by 3.1% q/q in Q3, its first quarterly increase in a year because of strong Q3 GDP ([“US GDP update: Q3 firm but Q4 to slow”](#), October 27, 2016). However, year-on-year productivity growth was flat in Q3. Productivity has been an enigma in this economic recovery, growing well below long-term trend (see Chart 1 below).

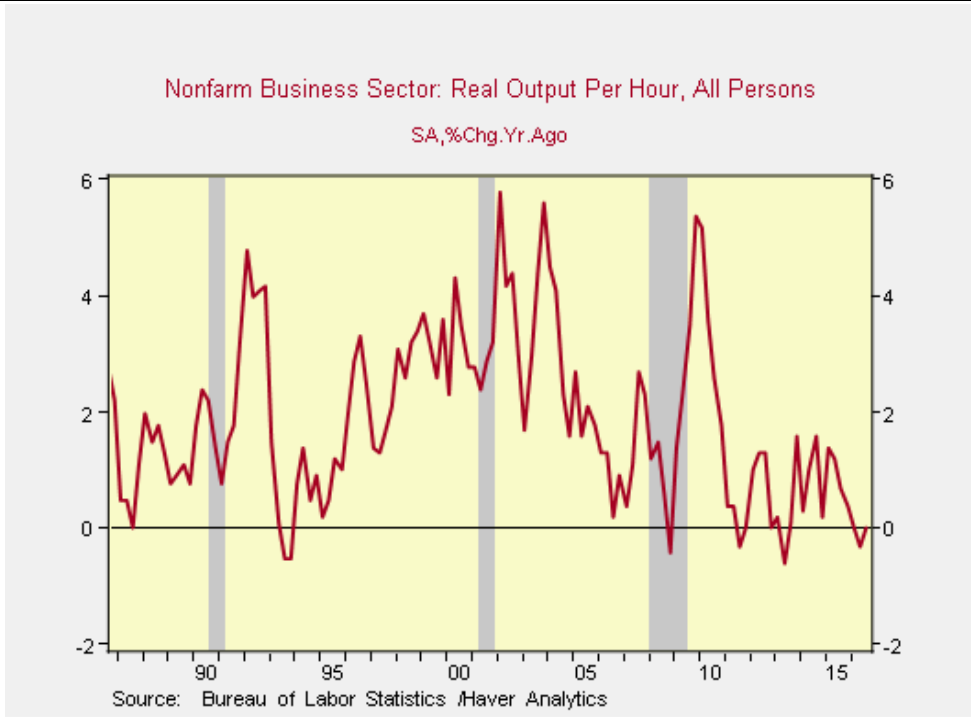
Explanations for the sluggish productivity gains include weak business investment which is being constrained by restrictive government regulations, uncertainty about future taxes and regulations, and high benefits obligations for businesses ([“Resetting Fed Policy”](#), October 7, 2016). In addition, a large chunk of job gains in this economic recovery have occurred in low-productivity service sector jobs. Productivity growth has also been constrained in some sectors with restrictive licensing laws causing high bars to entry for potential workers and less competition.

Unit labor costs, which measures compensation per unit of output rose by only 0.3% q/q because of the solid improvement in quarterly productivity growth. Unit labor costs year-on-year growth remained within its recent 2.3-2.7% range, highlighting the limits in how much firms can raise prices and wages with slow revenue growth (see Chart 2 below). Real compensation per hour showed a solid 1.7% increase on the quarter, but its yr/yr trend is a soft rise as wages remain constrained by low productivity growth remains (see Chart 3 below). Higher wages not matched by productivity gains would push up unit labor costs and squeeze margins unless product prices are raised commensurately ([“How much can US wages rise?”](#), October 26, 2016).

These issues are very important to both fiscal and monetary policy setting. The FOMC has lowered its expectations for longer-term growth and the natural rate of interest because of lower estimates of productivity and it now has a shallow path of rate increases. In addition, as policymakers have acknowledged that monetary policy has reached its limits and with renewed focus on fiscal policy, infrastructure spending should be implemented effectively to increase the productive capacity in the US.

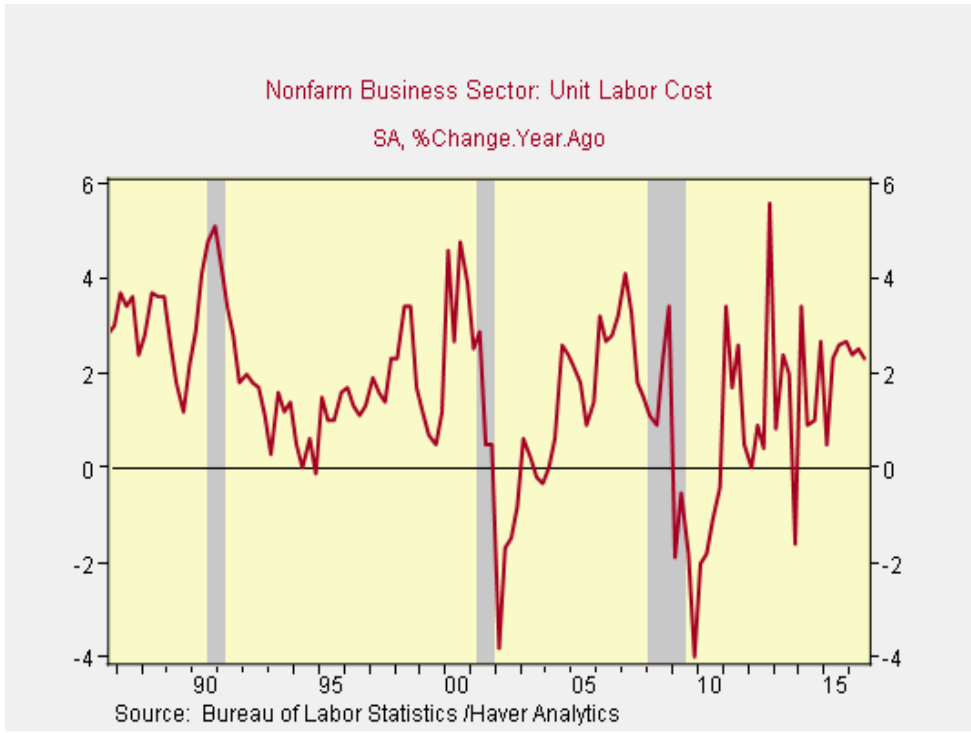
04 November 2016

Chart 1: Real nonfarm business productivity (yoy, %)



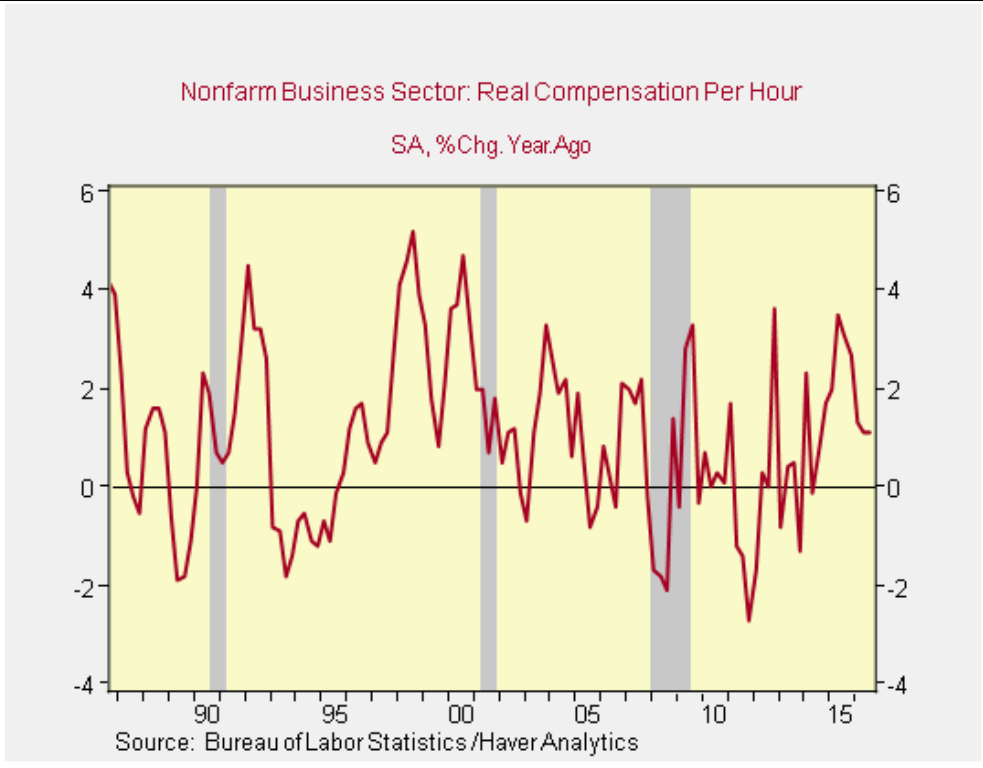
Source: Quarterly data. Source: Bureau of Labor Statistics and Haver Analytics

Chart 2: Unit labor cost (yoy, %)



Source: Quarterly data. Source: Bureau of Labor Statistics and Haver Analytics

Chart 3: Real compensation per hour (yoy, %)



Source: Quarterly data. Source: Bureau of Labor Statistics and Haver Analytics

Disclaimer

This document was compiled by the above mentioned authors of the economics department of Berenberg Capital Markets LLC (hereinafter also referred to as “BCM”). **BCM has made any effort to carefully research and process all information.** The information has been obtained from sources which we believe to be reliable such as, for example, Thomson Reuters, Bloomberg and the relevant specialised press. However, we do not assume liability for the correctness and completeness of all information given. The provided information has not been checked by a third party, especially an independent auditing firm. We explicitly point to the stated date of preparation. The information given can become incorrect due to passage of time and/or as a result of legal, political, economic or other changes. We do not assume responsibility to indicate such changes and/or to publish an updated document. The forecasts contained in this document or other statements on rates of return, capital gains or other accession are the personal opinion of the author and we do not assume liability for the realisation of these.

This document is only for information purposes. It does not constitute a financial analysis, investment advice or **recommendation to buy financial instruments. It does not replace the recipient’s procurement of independent legal, tax or financial advice.**

This document has been classified as fair and balanced for the purposes of FINRA rules. Please contact Berenberg Capital Markets LLC (+1 617.292.8200), if you require additional information.

Remarks regarding foreign investors

The preparation of this document is subject to regulation by US law. The distribution of this document in other jurisdictions may be restricted by law, and persons, into whose possession this document comes, should inform themselves about, and observe, any such restrictions.

United Kingdom

This document is meant exclusively for institutional investors and market professionals, but not for private customers. It is not for distribution to or the use of private investors or private customers.

Copyright

BCM is a wholly owned subsidiary of Joh. Berenberg, Gossler & Co. KG (“Berenberg Bank”). BCM reserves all the rights in this document. No part of the document or its content may be rewritten, copied, photocopied or duplicated in any form by any means or redistributed without the BCM’s prior written consent. Berenberg Bank may distribute this commentary on a third party basis to its customers.

© July 2015 Berenberg Capital Markets, LLC, Member FINRA and SPIC.

Contacts: BCM

www.berenberg.com
e-mail US: firstname.lastname@berenberg-us.com



JOH. BERENBERG, GOSSLER & CO. KG

Internet www.berenberg.com

E-mail: firstname.lastname@berenberg.com

EQUITY RESEARCH

AEROSPACE & DEFENCE

Andrew Gollan +44 20 3207 7891
Charlotte Keyworth +44 20 3753 3013
Ross Law +44 20 3465 2692

AUTOMOTIVES

Adam Hull +44 20 3465 2749
Paul Kratz +44 20 3465 2678

BANKS

Adam Barrass +44 20 3207 7923
James Chappell +44 20 3207 7844
Andrew Lowe +44 20 3465 2743
Andreas Markou (EM) +44 20 3753 3022
Eoin Mullany +44 20 3207 7854
Peter Richardson +44 20 3465 2681
Jonathan Sharpe +44 20 3753 3031

BEVERAGES

Javier Gonzalez Lastra +44 20 3465 2719
Batuhan Karabekir (EM) +44 20 3465 2631
Adam Mizrahi +44 20 3465 2653

BUSINESS SERVICES, LEISURE & TRANSPORT

Roberta Claccia +44 20 3207 7805
Najet El Kassir +44 20 3207 7836
Stuart Gordon +44 20 3207 7858
Josh Puddle +44 20 3207 7881
Julia Winarso +44 20 3465 2627

CAPITAL GOODS

Sebastian Kuene +44 20 3207 7856
Philippe Lorrain +44 20 3207 7823
Rizk Maldi +44 20 3207 7806
Horace Tam +44 20 3465 2726
Simon Toennesen +44 20 3207 7819

EQUITY SALES

SPECIALIST SALES

AEROSPACE & DEFENCE
Bruna Zugliani +44 20 3207 7818

AUTOMOTIVE & THEMATICS

Chris Armstrong +44 20 3207 7809

BANKS & DIVERSIFIED FINANCIALS

Iro Papadopoulou +44 20 3207 7924

BUSINESS SERVICES, LEISURE & TRANSPORT

Rebecca Langley +44 20 3207 7930

CONSTRUCTION, CHEMICALS, METALS & MINING

James Williamson +44 20 3207 7842

CONSUMER STAPLES

Rupert Trotter +44 20 3207 7815

CONSUMER DISCRETIONARY

Victoria Maigrot +44 20 3753 3010

HEALTHCARE

Frazer Hall +44 20 3207 7875

MEDIA & TELECOMMUNICATIONS

Julia Thannheiser +44 20 3465 2676

SPECIAL SITUATIONS

Jeremy Grant +44 20 3207 7890

SALES

BENELUX
Miel Bakker +44 20 3207 7808
Martin de Laet +44 20 3207 7804
Alexander Wace +44 20 3465 2670

GERMANY

Michael Brauburger +49 69 91 30 90 741
Nina Buechs +49 69 91 30 90 735
André Grosskurth +49 69 91 30 90 734

CHEMICALS

Sebastian Bray +44 20 3753 3011
Andrew Heap +44 20 3207 7918

CONSTRUCTION

Lush Mahendrarajah +44 20 3207 7896
Robert Muir +44 20 3207 7860
Olivia Peters +44 20 3465 2646

ENERGY

Yuriy Kukhtanych (EM) +44 20 3465 2675

FOOD MANUFACTURING AND H&PC

Rosie Edwards +44 20 3207 7880
Yordana Mavrodieva +44 20 3207 7817
Fintan Ryan +44 20 3465 2748
James Targett +44 20 3207 7873

FOOD RETAIL

Batuhan Karabekir (EM) +44 20 3465 2631

GENERAL MID CAP - EU

Gunnar Cohrs +44 20 3207 7894
Martin Comtesse +44 20 3207 7878
Flavien Hias +44 20 3465 2693
Aymeric Lang +44 20 3753 3037
Anna Patrice +44 20 3207 7863
Benjamin Pfannes-Varrow +44 20 3465 2620
Simona Sarli +44 20 3207 7834
Julia Scheufler +44 20 3753 3016

GENERAL MID CAP - UK

Robert Chantry +44 20 3207 7861
Sam England +44 20 3465 2687
Ned Hammond +44 20 3753 3017
Benjamin May +44 20 3465 2667
Owen Shirley +44 20 3465 2731

GERMANY (cont'd)

Florian Peter +49 69 91 30 90 740
Joerg Wenzel +49 69 91 30 90 743

UK

Alexandra Clément +44 20 3753 3018
Fabian De Smet +44 20 3207 7810
Karl Hancock +44 20 3207 7803
Sean Heath +44 20 3465 2742
David Hogg +44 20 3465 2628
Peter Kaineder +44 20 3753 3062
James Matthews +44 20 3207 7807
David Mortlock +44 20 3207 7850
Eleni Papoula +44 20 3465 2741
Bhavin Patel +44 20 3207 7926
Richard Payman +44 20 3207 7825
Joanna Sanders +44 20 3207 7925
Mark Sheridan +44 20 3207 7802
George Smbert +44 20 3207 7911
Anita Surana +44 20 3207 7855
Paul Walker +44 20 3465 2632

FRANCE

Thibault Bourgeat +33 1 5844 9505
Alexandre Chevassus +33 1 5844 9512
Dailia Farigoule +33 1 5844 9510
Clémence Peyraud +33 1 5844 9521
Benjamin Voisin +33 1 5844 9507

SCANDINAVIA

Frederik Angel +44 20 3753 3055
Marco Weiss +49 40 350 60 719

GENERAL RETAIL

Conrad Bartos +44 20 3753 3053
Michelle Wilson +44 20 3465 2663

HEALTHCARE

Scott Bardo +44 20 3207 7869
Jakob Berry +44 20 3465 2724
Alistair Campbell +44 20 3207 7876
Graham Doyle +44 20 3465 2634
Klara Fernandes +44 20 3465 2718
Tom Jones +44 20 3207 7877
Joseph Lockey +44 20 3465 2730
Louise Pearson +44 20 3465 2747
Laura Sutcliffe +44 20 3465 2669

INSURANCE

Trevor Moss +44 20 3207 7893
Emanuele Musio +44 20 3207 7916
Iain Pearce +44 20 3465 2665
Sami Taipalus +44 20 3207 7866

LUXURY GOODS

Zuzanna Pusz +44 20 3207 7812

MEDIA

Robert Berg +44 20 3465 2680
Laura Janssens +44 20 3465 2639
Alastair Reid +44 20 3207 7841
Sarah Simon +44 20 3207 7830

METALS & MINING

Alessandro Abate +44 20 3753 3029
Fawzi Hanano +44 20 3207 7910
Yuriy Vlasov +44 20 3465 2674

SWITZERLAND, AUSTRIA & ITALY

Andrea Ferrari +41 44 283 2020
Carsten Kinder +41 44 283 2024
Gianni Lavigna +41 44 283 2038
Jamie Nettleton +41 44 283 2026
Benjamin Stillfried +41 44 283 2033

CRM

Louise Hughes +44 20 3753 3066
Jessica Jarmyn +44 20 3465 2696
Edwina Lucas +44 20 3207 7908
Greg Swallow +44 20 3207 7833

CORPORATE ACCESS

Lindsay Arnold +44 20 3207 7821
Jennie Jiriny +44 20 3207 7886
Stella Siggins +44 20 3465 2630

EVENTS

Laura Hawes +44 20 3753 3008
Suzy Khan +44 20 3207 7915
Charlotte Kilby +44 20 3207 7832
Natalie Meech +44 20 3207 7831
Ellen Parker +44 20 3465 2684
Sarah Weyman +44 20 3207 7801

SALES TRADING

HAMBURG
Tim Storm +49 40 350 60 415

PARIS

Vincent Klein +33 1 58 44 95 09
Antonio Scutto +33 1 58 44 95 03

REAL ESTATE

Kai Klose +44 20 3207 7888
Tina Munda +44 20 3465 2716

TECHNOLOGY

Jean Beaubois +44 20 3207 7835
Georgios Kertsos +44 20 3465 2715
Gal Munda +44 20 3465 2746
Tammy Qiu +44 20 3465 2673

TELECOMMUNICATIONS

Ondrej Cabejssek (EM) +44 20 3753 3071
Usman Ghazi +44 20 3207 7824
Siyi He +44 20 3465 2697
Laura Janssens +44 20 3465 2639
Paul Marsch +44 20 3207 7857
Michael Summerville +44 20 3207 7914

THEMATIC RESEARCH

Nick Anderson +44 20 3207 7838
Asad Farid +44 20 3207 7932

TOBACCO

Jonathan Leinster +44 20 3465 2645

UTILITIES

Robin Abrams +44 20 3465 2635
Andrew Fisher +44 20 3207 7937
Lawson Steele +44 20 3207 7887

ECONOMICS

Florian Hense +44 20 3207 7859
Carsten Hesse (EM) +44 20 3753 3001
Kallum Pickering +44 20 3465 2672
Holger Schmieding +44 20 3207 7889

LONDON

Mike Berry +44 20 3465 2755
Stewart Cook +44 20 3465 2752
Mark Edwards +44 20 3753 3004
Tristan Hedley +44 20 3753 3006
Peter King +44 20 3753 3139
Christoph Kleinasser +44 20 3753 3063
Chris McKeand +44 20 3207 7938
Simon Messman +44 20 3465 2754
AJ Pulley +44 20 3465 2756
Michael Schumacher +44 20 3753 3006
Paul Somers +44 20 3465 2753

EQUITY TRADING

HAMBURG

David Hohn +49 40 350 60 761
Gregor Labahn +49 40 350 60 571
Lennart Pleus +49 40 350 60 596
Marvin Schweden +49 40 350 60 576
Linus Weidner +49 40 350 60 798
Philipp Wiechmann +49 40 350 60 346
Christoffer Winter +49 40 350 60 559

LONDON

Edward Burlison-Rush +44 20 3753 3055
Richard Kenny +44 20 3753 3083

ELECTRONIC TRADING

Daniel Eichhorn +49 40 350 60 391
Matthias Führer +49 40 350 60 597

BERENBERG CAPITAL MARKETS LLC

Member FINRA & SIPC

E-mail: firstname.lastname@berenberg-us.com

EQUITY SALES

SALES

Kelleigh Faldi +1 617 292 8288
Isabella Fantini +1 646 445 4861
Shawna Giust +1 646 445 7216
Rich Harb +1 617 292 8228
Zubin Hubner +1 646 445 5572
Jessica London +1 646 445 7218
Ryan McDonnell +1 646 445 7214

SALES (cont'd)

Emily Mouret +1 415 802 2525
Peter Nichols +1 646 445 7204
Kieran O'Sullivan +1 617 292 8292

CRM

Laura Cooper +1 646 445 7201

CORPORATE ACCESS

Olivia Lee +1 646 445 7212
Tiffany Smith +1 646 445 4874

EVENTS

Patricia Ehrhart +1 646 445 4863

SALES TRADING

Christopher Kanian +1 646 445 5576
Lars Schwartz +1 646 445 5571
Brett Smith +1 646 445 4873
Bob Spillane +1 646 445 5574

ECONOMICS

Mickey Levy +1 646 445 4842
Roiana Reid +1 646 445 4865