

#### About

This document contains a number of tables and charts outlining the most important trends from the latest update of the Total Economy Database. The data is based on the Adjusted version, in which real GDP growth rates for the United States, China and Japan have been upwardly adjusted using alternative price indices for ICT investment goods. Please refer to the TED website for more details.

For more information and updates, see:

<http://www.conference-board.org/data/economydatabase/>

Specific data requests, comments, suggestions? Please email:

[ted\\_geo@conference-board.org](mailto:ted_geo@conference-board.org)

#### Tables

- 1 Growth of GDP, Employment and GDP per Person Employed by Major Region, 2015-2017
- 2 Contribution to Growth in World GDP, Employment and GDP per Person Employed by Major Region, 2015-2017
- 3 Growth of Labor Productivity, Total Hours Worked and Real GDP for Major Mature Economies, 1999-2017
- 4 Growth of Labor Productivity, Persons Employed and Real GDP for Major Emerging Economies, 1999-2017
- 5 Growth of Labor Productivity (GDP per hour, annual average, percent), Country Details, 1999-2017
- 6 Growth of Total Hours Worked (annual average, percent), Country Details, 1999-2017
- 7 Growth of Real GDP (annual average, percent), Country Details, 1999-2017
- 8 Labor Productivity and Per Capita Income Levels and the Effects of Working Hours and Labor Utilization, 2016
- 9 Growth and level of labor productivity (GDP per person employed), Country Details, 1999-2016
- 10 Contributions of Sources of Growth to Aggregate GDP Growth, Major Regions, 1999-2016
- 11 Total Factor Productivity Growth by Major Region, 1999-2016
- 12 Total Factor Productivity Growth, Country Details, 1999-2016

#### Charts

- 1 Trend growth of Labor productivity (output per person) using HP filter, Major Regions, 1970-2017
- 2 Contribution of Labor Productivity and Employment to GDP growth, Major Regions, 2000-2017
- 3 Growth of Labor Productivity and TFP, Major Regions, 1999-2016
- 4 Comparison of Overall Productivity Levels, Selected Countries, 1999 and 2016
- 5 Output (value added) per person employed in US\$, corrected for differences in price levels, Major Regions, 2016
- 6 Growth of Labor Productivity, World, Actual, Pre-2005 and Post-2005 Trend, 1995-2017

## Notes

Chinese data is presented in two series, 'China (Alternative)' and 'China (Official)'. The latter is based on official government data, while 'China (Alternative)' represents alternative growth numbers, based on the work of Prof. Harry X. Wu, Hitotsubashi University. All regional aggregates in this document that include China are based on these alternative growth rates. For more information on The Conference Board's alternative growth measures for China, please refer to:

[Wu \(2014\)](#)

[Alternative China GDP Series FAQ](#)

Europe includes all 28 members of the European Union as well as Iceland, Norway and Switzerland.

Euro Area includes all current members of the common currency area.

Other Mature Economies are Australia, Canada, Israel, Hong Kong, South Korea, New Zealand, Singapore, and Taiwan.

Other Developing Asia includes Bangladesh, Cambodia, Indonesia, Malaysia, Myanmar, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam.

Southeast Europe includes Albania, Bosnia and Herzegovina, Macedonia, Serbia and Montenegro, and Turkey.

EU-13 refers to new membership of the European Union since 2004.

EU-15 refers to membership of the European Union before 2004.

EU-28 refers to all current members of the European Union.

OECD includes all 34 current members of the Organisation of Economic Co-operation and Development.

## Disclaimer

© 2017 The Conference Board, Inc. All data contained in or on the website ("Site") of The Conference Board, Inc. ("TCB"), including but not limited to TCB's **Total Economy Database**™, are protected by United States and international copyright laws. The data are provided for informational purposes only and may only be accessed, reviewed, and/or used in accordance with, and the permission of, TCB consistent with a subscriber or license agreement and the Terms of Use displayed on TCB's Site at <http://www.conference-board.org>. The data and analysis contained herein may not be used, redistributed, published, or posted by any means without express written permission from TCB.

### COPYRIGHT TERMS OF USE

By downloading and retaining a copy of TCB's **Total Economy Database**™, you agree to all conditions and terms of use enumerated hereunder. All material contained in the **Total Economy Database**™, as well as all material made available on TCB's Site, are protected by United States and international copyright laws. You must abide by all copyright notices and restrictions contained in TCB's materials.

You may not reproduce, redistribute (in any form including over any local area or other network or service), display, perform, create derivative works of, sell, license, extract for use in a database, or otherwise use any materials (including computer programs and other code) on TCB's Sites ("Site Material") or in the **Total Economy Database**™, except that you may download Site Material in the form of one machine readable copy that you will use only for personal, noncommercial purposes, and only if you do not alter Site Material or remove any trademark, copyright or other notice displayed on the Site Material. If you are a subscriber to any of the services offered on TCB's Site, you may be permitted to use Site Material according to the terms of your subscription agreement.

YOU ACCEPT THE DATA "AS IS" AND "AS AVAILABLE." YOU ACKNOWLEDGE AND AGREE THAT, WHILE TCB COMPILES THE DATA FROM SOURCES BELIEVED TO BE RELIABLE, TCB MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE SERVICE OR DATA (OR THE CONTENTS THEREOF), INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE (WHETHER OR NOT THE PURPOSE OR INTENDED USE HAS BEEN DISCLOSED), CONDITION OF QUALITY, DESCRIPTION, OPERATION, ADEQUACY, INTERFERENCE WITH USE OR ENJOYMENT OF USE, TITLE, COMPLETENESS, TIMELINESS OR CORRECTNESS. TCB DOES NOT WARRANT THAT THE DATA WILL BE ERROR-FREE, OR FREE OF VIRUSES, OR OTHER HARMFUL COMPONENTS, OR THAT ERRORS WILL BE CORRECTED. IF YOU ARE BOUND BY STATE LAWS HAVING APPLICABILITY TO THIS DISCLAIMER THAT DO NOT PERMIT CERTAIN WARRANTY EXCLUSIONS AND/OR LIMITATIONS, SUCH WARRANTY SHALL BE LIMITED IN TIME TO ONE HUNDRED EIGHTY (180) CALENDAR DAYS.

### Trademarks

"THE CONFERENCE BOARD®," the TORCH LOGO, "The Conference Board Leading Economic Index®", "The Conference Board Coincident Economic Index®", "Total Economy Database™" and other logos, indicia and trademarks featured on TCB's Sites and materials are trademarks owned by The Conference Board, Inc. in the United States and other countries ("TCB Trademarks"). You may not use TCB Trademarks in connection with any product or service that does not belong to TCB nor in any manner that is likely to cause confusion among users about whether The Conference Board, Inc. is the source, sponsor, or endorser of the product or service, nor in any manner that disparages or discredits TCB.

**TABLE 1: Growth of GDP, Employment and GDP per Person Employed by Major Region, 2015-2017**

	2015			2016			2017 (Projection)		
	GDP	Employment	GDP per Person Employed	GDP	Employment	GDP per Person Employed	GDP	Employment	GDP per Person Employed
United States	2.7	1.5	1.2	1.7	1.5	0.2	2.2	1.3	0.8
Europe	2.0	1.1	0.9	1.9	1.2	0.6	1.9	0.8	1.1
<i>of which: Euro Area</i>	1.7	1.0	0.6	1.8	1.4	0.4	1.8	0.9	0.8
<i>of which: United Kingdom</i>	2.2	1.8	0.4	1.8	1.4	0.4	1.5	0.5	1.0
Japan	1.3	0.4	0.9	1.1	1.0	0.1	1.3	0.1	1.2
Other Mature	1.9	1.4	0.5	2.2	1.2	1.0	2.2	1.4	0.8
<b>Mature Economies</b>	<b>2.2</b>	<b>1.2</b>	<b>1.0</b>	<b>1.8</b>	<b>1.3</b>	<b>0.5</b>	<b>2.0</b>	<b>0.9</b>	<b>1.0</b>
China	3.6	0.3	3.2	3.9	0.2	3.6	4.1	0.1	4.0
India	7.5	2.0	5.4	7.0	1.9	5.0	6.8	1.8	4.9
Other Developing Asia	5.1	1.1	4.2	5.1	2.1	3.1	5.2	1.6	3.7
Latin America	-0.2	1.4	-1.5	-1.4	0.0	-1.6	1.4	0.8	0.6
<i>of which: Brazil</i>	-3.8	0.2	-4.0	-3.6	-1.8	-1.8	0.5	0.0	0.5
<i>of which: Mexico</i>	2.6	2.3	0.3	2.3	1.3	1.0	1.8	0.7	1.1
Middle East & North Africa	2.5	2.3	-0.6	3.4	2.2	1.5	2.1	2.1	0.2
Sub-Saharan Africa	3.5	3.7	-0.7	1.5	3.7	-2.2	3.1	3.1	0.4
Russia, Central Asia and Southeast Europe	-0.1	0.2	-1.1	1.0	0.6	0.3	1.8	0.2	1.6
<b>Emerging Markets and Developing Economies</b>	<b>3.1</b>	<b>1.4</b>	<b>1.7</b>	<b>3.1</b>	<b>1.4</b>	<b>2.0</b>	<b>3.6</b>	<b>1.2</b>	<b>2.7</b>
<b>World</b>	<b>2.7</b>	<b>1.3</b>	<b>1.3</b>	<b>2.5</b>	<b>1.4</b>	<b>1.3</b>	<b>2.9</b>	<b>1.2</b>	<b>1.9</b>
<b>Addenda:</b>									
EU-28	2.0	1.1	0.9	1.9	1.3	0.6	1.9	0.8	1.1
OECD	2.3	1.3	1.0	1.8	1.4	0.4	2.0	1.0	0.9

**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

**Notes:** Please refer to the notes at the beginning of this document for a list of countries included in the regional aggregates; Growth rates are based on the annual percentage of difference of each variable, and global aggregates of growth rates are based on 123 countries (see table 9 for a list of countries); Regional GDP and labor productivity growth rates are aggregated using shares in nominal PPP converted GDP; Regional employment growth is weighted using employment shares.

**TABLE 2: Contribution to Growth in World GDP, Employment and GDP per Person Employed by Major Region, 2015-2017**

	2015			2016			2017 (Projection)		
	GDP	Employment	GDP per Person Employed	GDP	Employment	GDP per Person Employed	GDP	Employment	GDP per Person Employed
United States	0.43	0.07	0.20	0.27	0.07	0.03	0.34	0.07	0.13
Europe	0.36	0.09	0.15	0.34	0.10	0.11	0.33	0.06	0.19
<i>of which: Euro Area</i>	0.20	0.05	0.08	0.21	0.07	0.05	0.21	0.05	0.10
<i>of which: United Kingdom</i>	0.05	0.02	0.01	0.04	0.01	0.01	0.04	0.01	0.02
Japan	0.06	0.01	0.04	0.05	0.02	0.00	0.06	0.00	0.05
Other Mature	0.12	0.04	0.03	0.14	0.03	0.06	0.14	0.04	0.05
<b>Mature Economies</b>	<b>0.97</b>	<b>0.20</b>	<b>0.43</b>	<b>0.80</b>	<b>0.22</b>	<b>0.21</b>	<b>0.87</b>	<b>0.16</b>	<b>0.43</b>
China	0.58	0.08	0.53	0.63	0.06	0.60	0.67	0.01	0.66
India	0.49	0.32	0.35	0.48	0.31	0.34	0.48	0.30	0.35
Other Developing Asia	0.36	0.15	0.29	0.37	0.28	0.22	0.38	0.22	0.27
Latin America	-0.01	0.11	-0.13	-0.11	0.00	-0.12	0.11	0.07	0.04
<i>of which: Brazil</i>	-0.11	0.01	-0.12	-0.10	-0.06	-0.05	0.01	0.00	0.01
<i>of which: Mexico</i>	0.05	0.04	0.01	0.05	0.02	0.02	0.04	0.01	0.02
Middle East & North Africa	0.17	0.09	-0.04	0.23	0.09	0.10	0.14	0.09	0.02
Sub-Saharan Africa	0.10	0.37	-0.02	0.04	0.38	-0.06	0.08	0.32	0.01
Russia, Central Asia and Southeast Europe	-0.01	0.01	-0.07	0.07	0.03	0.02	0.11	0.01	0.10
<b>Emerging Markets and Developing Economies</b>	<b>1.66</b>	<b>1.13</b>	<b>0.91</b>	<b>1.71</b>	<b>1.15</b>	<b>1.10</b>	<b>1.98</b>	<b>1.01</b>	<b>1.46</b>
<i>Reallocation effect</i>			-0.04			-0.17			-0.20
<b>World</b>	<b>2.63</b>	<b>1.33</b>	<b>1.34</b>	<b>2.50</b>	<b>1.38</b>	<b>1.30</b>	<b>2.85</b>	<b>1.18</b>	<b>1.88</b>
<b>Addenda:</b>									
EU-28	0.35	0.08	0.15	0.33	0.09	0.11	0.32	0.06	0.18
OECD	1.08	0.25	0.47	0.84	0.26	0.19	0.89	0.19	0.42

**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

**Notes:** Please refer to the notes at the beginning of this document for a list of countries included in the regional aggregates; Growth rates are based on the annual percentage of difference of each variable, and the global aggregate is based on 123 countries (see table 9 for a list of countries); The reallocation effect is obtained as GDP weighted global labor productivity growth minus labor productivity using un-weighted employment growth. It reflects the impact of countries with a relatively high employment share but low productivity levels on world productivity growth.

**TABLE 3: Growth of Labor Productivity, Total Hours Worked and Real GDP for Major Mature Economies, 1999-2017**

	United States	Japan	United Kingdom	Euro Area	EU-28
<i>Labor Productivity Growth (GDP per hour, annual average, percent)</i>					
1999-2006	2.9	2.2	2.3	1.5	1.9
2007-2014	1.2	1.2	0.1	0.6	0.7
2014	0.6	0.2	0.3	0.6	0.7
2015	0.8	1.3	0.7	0.5	0.9
2016	0.5	0.5	0.4	0.7	0.8
2017 (Projection)	1.0	1.1	1.0	0.8	1.0
<i>Growth in Total Hours Worked (annual average, percent)</i>					
1999-2006	0.5	-0.4	0.7	0.9	0.5
2007-2014	0.1	-0.6	0.7	-0.5	-0.2
2014	1.9	0.3	2.8	0.5	1.1
2015	1.9	0.0	1.5	1.2	1.2
2016	1.2	0.6	1.4	1.2	1.2
2017 (Projection)	1.2	0.2	0.5	1.0	0.9
<i>Real GDP Growth (annual average, percent)</i>					
1999-2006	3.4	1.8	3.0	2.3	2.6
2007-2014	1.3	0.6	0.9	0.3	0.6
2014	2.5	0.5	3.1	1.2	1.7
2015	2.7	1.3	2.2	1.7	2.0
2016	1.7	1.1	1.8	1.8	1.9
2017 (Projection)	2.2	1.3	1.5	1.8	1.9

**Source:** The Conference Board Total Economy Database™ (Adjusted version), May 2017.

**Notes:** Growth rates are based on the annual percentage of difference of each variable. Regional GDP and labor productivity growth rates are aggregated using shares in nominal PPP converted GDP; Regional hours growth is weighted using total hours shares. Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates.

**TABLE 4: Growth of Labor Productivity, Persons Employed and Real GDP for Major Emerging Economies, 1999-2017**

	Major Emerging Economies*	Brazil	Russian Federation	India	China (Alternative)	China (Official)	South Africa	Mexico	Indonesia	Turkey
<i>Labor Productivity Growth (GDP per person, annual average, percent)</i>										
1999-2006	4.9	-0.2	6.2	4.8	8.1	9.1	2.1	0.8	3.3	3.7
2007-2014	5.1	1.9	2.2	6.4	7.8	9.6	1.2	0.0	3.6	1.7
2014	4.0	-2.3	0.5	5.1	6.2	7.4	-0.2	2.6	3.3	3.5
2015	2.2	-4.0	-3.9	5.4	3.2	7.2	-2.5	0.3	4.7	3.4
2016	2.6	-1.8	-0.4	5.0	3.6	7.0	0.0	1.0	1.8	0.6
2017 (Projection)	3.3	0.5	2.1	4.9	4.0	6.9	-0.7	1.1	3.7	0.0
<i>Growth in Persons Employed (annual average, percent)</i>										
1999-2006	1.3	3.2	0.7	1.9	0.8	0.7	1.7	1.8	1.1	0.5
2007-2014	0.8	1.6	0.2	0.9	0.4	0.4	1.2	2.0	2.3	3.0
2014	1.0	2.9	0.2	1.7	0.4	0.4	1.9	-0.3	1.7	1.6
2015	1.0	0.2	1.1	2.0	0.3	0.3	3.9	2.3	0.2	2.5
2016	0.9	-1.8	0.1	1.9	0.2	0.2	0.3	1.3	3.1	2.3
2017 (Projection)	0.7	0.0	-0.9	1.8	0.1	0.1	1.5	0.7	1.3	2.2
<i>Real GDP Growth (annual average, percent)</i>										
1999-2006	6.3	2.9	6.9	6.8	8.9	9.9	3.9	2.6	4.4	4.2
2007-2014	6.1	3.5	2.4	7.4	8.2	10.0	2.5	2.0	6.0	4.8
2014	5.0	0.5	0.7	6.9	6.6	7.8	1.7	2.3	5.0	5.2
2015	3.1	-3.8	-2.8	7.5	3.6	7.5	1.3	2.6	4.9	6.1
2016	3.4	-3.6	-0.2	7.0	3.9	7.2	0.3	2.3	5.0	2.9
2017 (Projection)	3.9	0.5	1.2	6.8	4.1	6.9	0.8	1.8	5.1	2.2

**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

**Notes:** The Major Emerging Markets aggregate is based on the individual countries shown in the table, excluding China (Official). For more information, please refer to the notes in the introduction to these summary tables; Growth rates are based on the annual percentage of difference of each variable. Regional GDP and labor productivity growth rates are aggregated using shares in nominal PPP converted GDP; Regional employment growth is weighted using employment shares. Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates.

**TABLE 5: Growth of Labor Productivity (GDP per hour, annual average, percent), Country Details, 1999-2017**

	1999-2006	2007-2014	2014	2015	2016	2017 (Projection)
United States	2.9	1.2	0.6	0.8	0.5	1.0
Japan	2.2	1.2	0.2	1.3	0.5	1.1
<b>Euro Area</b>	<b>1.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.7</b>	<b>0.8</b>
Austria	1.8	0.8	0.3	1.6	0.6	1.0
Belgium	1.4	0.4	1.4	0.9	0.0	0.6
Cyprus	2.0	0.3	0.9	-0.1	0.1	0.3
Estonia	6.0	2.2	2.4	-1.0	1.1	1.8
Finland	2.4	0.1	0.0	0.3	0.3	-0.9
France	1.9	0.5	0.8	0.5	1.2	0.9
Germany	1.6	0.7	0.4	0.8	1.2	1.2
Greece	2.7	-0.7	2.2	-1.3	-1.4	-0.5
Ireland	3.4	2.3	6.0	1.3	2.3	1.2
Italy	0.5	0.1	0.2	-0.2	-0.8	0.3
Luxembourg	1.2	0.0	2.5	0.9	1.3	1.0
Malta	3.1	1.6	4.5	4.2	1.1	1.4
Netherlands	1.8	0.3	0.9	1.5	0.2	0.4
Portugal	1.3	1.0	-0.9	0.1	1.2	0.7
Slovak Republic	4.6	2.6	1.8	2.1	1.7	1.2
Slovenia	3.8	0.4	1.5	0.8	0.8	1.1
Spain	0.2	1.4	0.3	0.4	0.9	0.8
<b>Other Europe</b>	<b>2.9</b>	<b>0.9</b>	<b>0.7</b>	<b>1.4</b>	<b>0.9</b>	<b>1.6</b>
Bulgaria	3.6	2.6	1.0	3.2	3.0	2.4
Czech Republic	4.6	1.0	1.4	4.3	-0.2	1.5
Denmark	1.4	0.8	1.5	0.5	-0.3	0.5
Hungary	4.0	0.5	-1.2	1.1	-1.1	2.8
Iceland	2.9	1.2	-0.6	-0.1	3.2	1.2
Latvia	7.4	1.9	2.9	3.1	2.2	2.5
Lithuania	6.0	3.1	1.9	-0.9	-0.9	2.3
Norway	2.0	-0.4	0.5	1.3	0.7	0.8
Poland	4.3	2.8	1.2	1.9	2.0	2.7
Romania	6.9	3.4	3.1	4.4	5.6	4.3
Sweden	2.9	0.2	1.1	2.4	0.9	1.1
Switzerland	1.4	0.7	0.6	-1.4	-0.3	1.0
United Kingdom	2.3	0.1	0.3	0.7	0.4	1.0
<b>Other Mature</b>	<b>2.9</b>	<b>2.0</b>	<b>1.3</b>	<b>1.0</b>	<b>2.2</b>	<b>0.9</b>
Australia	1.6	1.5	2.0	0.4	1.8	1.0
Canada	1.6	0.9	2.2	0.0	0.8	0.7
Hong Kong	3.3	2.7	4.5	1.0	1.4	1.1
Israel	1.6	1.0	1.1	0.1	1.2	0.5
New Zealand	1.4	1.1	-1.2	1.1	-1.1	-0.1
Singapore	4.0	0.7	0.0	2.1	2.1	0.4
South Korea	4.9	3.4	-0.9	1.9	2.9	1.6
Taiwan	4.1	2.8	3.0	1.1	4.2	0.4

**Source:** The Conference Board Total Economy Database™ (Adjusted version), May 2017.

**Notes:** Growth rates are based on the annual percentage of difference of each variable; Regional labor productivity growth rates are aggregated using shares in nominal PPP converted GDP; Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates.

**TABLE 6: Growth of Total Hours Worked (annual average, percent), Country Details, 1999-2017**

	1999-2006	2007-2014	2014	2015	2016	2017 (Projection)
United States	0.5	0.1	1.9	1.9	1.2	1.2
Japan	-0.4	-0.6	0.3	0.0	0.6	0.2
<b>Euro Area</b>	<b>0.9</b>	<b>-0.5</b>	<b>0.5</b>	<b>1.2</b>	<b>1.2</b>	<b>1.0</b>
Austria	0.5	0.1	0.3	-0.6	0.9	0.6
Belgium	0.9	0.6	0.3	0.6	1.2	0.8
Cyprus	2.1	-0.6	-2.4	1.7	2.7	2.2
Estonia	0.8	-1.6	0.4	2.4	0.5	0.4
Finland	1.0	-0.2	-0.7	-0.1	1.0	2.1
France	0.3	0.2	-0.2	0.7	0.0	0.6
Germany	-0.2	0.4	1.2	0.9	0.7	0.4
Greece	1.3	-2.7	-1.8	1.1	1.4	3.2
Ireland	3.3	-1.7	2.4	3.1	2.8	2.2
Italy	1.0	-1.0	-0.1	1.0	1.7	0.6
Luxembourg	3.3	2.4	3.1	3.0	2.8	3.0
Malta	-0.1	1.5	3.6	3.1	3.9	2.3
Netherlands	0.6	0.3	0.5	0.5	2.0	1.8
Portugal	0.4	-1.5	1.8	1.5	0.2	0.9
Slovak Republic	-0.2	0.4	0.7	1.7	1.6	1.7
Slovenia	0.3	-0.1	1.6	1.5	1.7	1.8
Spain	3.6	-1.8	1.1	2.8	2.3	2.0
<b>Other Europe</b>	<b>-0.1</b>	<b>0.3</b>	<b>2.0</b>	<b>1.2</b>	<b>1.2</b>	<b>0.6</b>
Bulgaria	0.5	-0.7	0.3	0.4	0.4	0.5
Czech Republic	-0.6	0.1	1.3	0.2	2.6	1.1
Denmark	0.7	-0.6	0.2	1.1	1.6	0.9
Hungary	0.1	-0.3	5.3	2.1	3.1	0.7
Iceland	1.4	-0.1	2.6	4.2	3.9	3.0
Latvia	0.2	-1.7	-0.8	-0.3	-0.2	0.3
Lithuania	0.0	-1.2	1.6	2.7	3.2	0.6
Norway	0.4	1.5	1.4	0.3	0.4	0.4
Poland	-0.4	0.8	2.1	1.9	0.6	0.5
Romania	-2.0	-1.5	0.0	-0.4	-0.7	0.1
Sweden	0.5	0.9	1.4	1.6	2.3	1.3
Switzerland	0.8	1.0	1.4	2.3	1.6	0.4
United Kingdom	0.7	0.7	2.8	1.5	1.4	0.5
<b>Other Mature</b>	<b>1.4</b>	<b>0.8</b>	<b>2.1</b>	<b>0.9</b>	<b>0.1</b>	<b>1.3</b>
Australia	1.7	1.3	0.7	2.0	0.7	1.9
Canada	1.6	0.7	0.4	0.9	0.6	1.2
Hong Kong	1.4	0.4	-1.7	1.3	0.5	0.9
Israel	1.9	2.8	2.0	2.4	2.7	2.5
New Zealand	2.3	0.8	4.1	1.9	5.1	2.8
Singapore	2.0	4.6	3.6	-0.2	-0.1	1.2
South Korea	1.2	0.0	4.3	0.9	-0.1	0.7
Taiwan	0.7	0.7	1.0	-0.4	-2.7	1.5

**Source:** *The Conference Board Total Economy Database™ (Adjusted version), May 2017.*

**Notes:** Growth rates are based on the annual percentage of difference of each variable; Regional growth in hours worked is weighted using total hours shares; Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates.



**TABLE 7: Growth of Real GDP (annual average, percent), Country Details, 1999-2017**

	1999-2006	2007-2014	2014	2015	2016	2017 (Projection)
United States	3.4	1.3	2.5	2.7	1.7	2.2
Japan	1.8	0.6	0.5	1.3	1.1	1.3
<b>Euro Area</b>	<b>2.3</b>	<b>0.3</b>	<b>1.2</b>	<b>1.7</b>	<b>1.8</b>	<b>1.8</b>
Austria	2.4	0.9	0.6	1.0	1.5	1.6
Belgium	2.3	1.0	1.6	1.5	1.2	1.4
Cyprus	4.1	-0.3	-1.5	1.7	2.8	2.5
Estonia	6.9	0.5	2.8	1.4	1.6	2.2
Finland	3.4	0.0	-0.6	0.3	1.4	1.2
France	2.2	0.6	0.6	1.3	1.2	1.5
Germany	1.4	1.1	1.6	1.7	1.9	1.6
Greece	4.0	-3.3	0.4	-0.2	0.0	2.7
Ireland	6.8	0.6	8.5	4.4	5.2	3.4
Italy	1.5	-0.9	0.1	0.8	0.9	0.9
Luxembourg	4.6	2.3	5.6	4.0	4.2	4.0
Malta	2.9	3.1	8.3	7.4	5.0	3.7
Netherlands	2.4	0.6	1.4	2.0	2.2	2.2
Portugal	1.7	-0.6	0.9	1.6	1.4	1.6
Slovak Republic	4.3	3.0	2.6	3.8	3.3	2.9
Slovenia	4.1	0.4	3.1	2.3	2.5	3.0
Spain	3.9	-0.4	1.4	3.2	3.2	2.9
<b>Other Europe</b>	<b>3.3</b>	<b>1.4</b>	<b>2.8</b>	<b>2.7</b>	<b>2.2</b>	<b>2.2</b>
Bulgaria	4.2	1.9	1.3	3.6	3.4	2.9
Czech Republic	4.0	1.1	2.7	4.5	2.4	2.6
Denmark	2.2	0.2	1.7	1.6	1.3	1.5
Hungary	4.1	0.2	4.0	3.1	2.0	3.5
Iceland	4.4	1.1	1.9	4.1	7.2	4.2
Latvia	7.6	0.2	2.1	2.7	2.0	2.8
Lithuania	6.0	1.9	3.5	1.8	2.3	2.9
Norway	2.3	1.1	1.9	1.6	1.0	1.2
Poland	3.8	3.6	3.3	3.8	2.7	3.2
Romania	4.8	1.9	3.1	3.9	4.8	4.4
Sweden	3.4	1.2	2.6	4.1	3.3	2.4
Switzerland	2.1	1.7	2.0	0.8	1.3	1.5
United Kingdom	3.0	0.9	3.1	2.2	1.8	1.5
<b>Other Mature</b>	<b>4.4</b>	<b>3.0</b>	<b>3.1</b>	<b>1.9</b>	<b>2.2</b>	<b>2.2</b>
Australia	3.4	2.8	2.8	2.4	2.4	2.9
Canada	3.2	1.6	2.6	0.9	1.4	1.9
Hong Kong	4.8	3.1	2.8	2.4	1.9	2.0
Israel	3.5	3.9	3.2	2.5	4.0	3.1
New Zealand	3.8	1.9	2.8	3.1	3.9	2.7
Singapore	6.0	5.4	3.6	1.9	2.0	1.6
South Korea	6.1	3.4	3.3	2.8	2.8	2.3
Taiwan	4.9	3.5	4.0	0.7	1.4	1.9

**Source:** The Conference Board Total Economy Database™ (Adjusted version), May 2017.

**Notes:** Growth rates are based on the annual percentage of difference of each variable; Regional GDP growth rates are aggregated using shares in nominal PPP converted GDP; Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates.

**TABLE 8: Labor Productivity and Per Capita Income Levels and the Effects of Working Hours and Labor Utilization, 2016**

	Labor Productivity per Hour			Effect of Working Hours (4)	Labor Productivity per Person as % of US (5)=(2)+(4)	Effect of Employment/Population Ratio (6)=(8)-(5)	Average Per Capita Income		
	GDP/hour (US\$) (1)	as % of US (2)	Rank (3)				GDP/capita (US\$) (7)	as % of US (8)	Rank (9)
Luxembourg	95.5	139%	1	-20%	119%	62%	103,395	181%	1
Norway	92.2	134%	2	-26%	108%	13%	69,141	121%	3
Ireland	75.0	109%	3	-1%	108%	-9%	56,691	99%	7
Belgium	70.0	102%	4	-12%	90%	-11%	44,821	78%	17
United States	68.9	100%	5	0%	100%	0%	57,196	100%	6
Netherlands	67.8	98%	6	-18%	80%	8%	50,748	89%	8
France	67.2	98%	7	-17%	81%	-10%	40,546	71%	21
Denmark	67.2	98%	8	-19%	78%	5%	47,541	83%	13
Germany	66.7	97%	9	-22%	75%	8%	47,216	83%	14
Sweden	62.4	91%	10	-7%	83%	4%	49,898	87%	9
Switzerland	61.4	89%	11	-9%	80%	21%	57,955	101%	5
Singapore	59.6	87%	12	23%	110%	38%	84,640	148%	2
Austria	59.6	86%	13	-8%	79%	4%	47,204	83%	15
Australia	56.3	82%	14	1%	83%	4%	49,230	86%	10
Finland	55.5	81%	15	-5%	75%	-2%	41,824	73%	19
Canada	53.3	77%	16	-4%	74%	7%	45,866	80%	16
United Kingdom	52.2	76%	17	-4%	72%	2%	41,997	73%	18
Spain	52.1	76%	18	-3%	73%	-11%	35,637	62%	27
Italy	51.7	75%	19	-1%	74%	-10%	36,545	64%	25
Hong Kong	51.4	75%	20	18%	92%	11%	59,005	103%	4
Taiwan	50.8	74%	21	6%	80%	4%	48,318	84%	12
Iceland	45.7	66%	22	5%	71%	15%	49,041	86%	11
Japan	44.9	65%	23	-1%	65%	8%	41,464	72%	20
Cyprus	43.3	63%	24	1%	64%	-12%	29,482	52%	33
Malta	43.0	62%	25	7%	70%	-1%	39,157	68%	22
Slovak Republic	41.8	61%	26	-1%	60%	-5%	31,322	55%	30
Slovenia	40.7	59%	27	-3%	56%	-1%	31,976	56%	29
New Zealand	40.4	59%	28	0%	59%	7%	37,742	66%	23
Turkey	39.6	58%	29	2%	60%	-19%	23,665	41%	40
Israel	39.0	57%	30	4%	61%	3%	36,374	64%	26
Czech Republic	37.3	54%	31	0%	55%	3%	33,055	58%	28
South Korea	35.1	51%	32	9%	60%	5%	37,490	66%	24
Greece	34.7	50%	33	8%	58%	-11%	26,897	47%	37
Portugal	34.6	50%	34	2%	53%	-2%	28,909	51%	34
Lithuania	33.4	48%	35	3%	52%	0%	29,825	52%	31
Estonia	33.0	48%	36	3%	50%	1%	29,691	52%	32
Poland	31.7	46%	37	8%	54%	-6%	27,130	47%	36
Hungary	31.4	46%	38	5%	50%	-3%	27,325	48%	35
Latvia	29.8	43%	39	4%	47%	-2%	25,637	45%	38
Romania	28.7	42%	40	1%	43%	-7%	20,316	36%	41
Chile	27.0	39%	41	5%	44%	-2%	23,932	42%	39
Bulgaria	25.2	37%	42	-2%	34%	1%	20,105	35%	42
Mexico	20.1	29%	43	8%	37%	-4%	19,290	34%	43
EU-12	32.2	47%		3%	50%	-4%	26,304	46%	
EU-15	58.3	85%		-9%	75%	-3%	41,642	73%	
EU-27	52.5	76%		-6%	71%	-3%	38,564	67%	
Euro Area	58.3	85%		-10%	75%	-4%	40,740	71%	

Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.

Notes: Please refer to the notes at the beginning of this document for a list of countries included in the regional aggregates; Gross Domestic Product levels are expressed in 2016 US\$, converted by Purchasing Power Parities; Regional GDP and labor productivity growth rates are aggregated using shares in nominal PPP converted GDP.

**TABLE 9: Growth and level of labor productivity (GDP per person employed), Country Details, 1999-2016***Annual average growth, 1999-2006, 2007-2014, 2014, 2015, 2016 and level as a % of US in 2016*

	Annual Average Growth					GDP per person employed, % of US, 2016
	1999-2006	2007-2014	2014	2015	2016	
<b>World</b>	<b>2.8</b>	<b>2.3</b>	<b>2.2</b>	<b>1.3</b>	<b>1.3</b>	<b>30%</b>
United States	2.5	1.1	0.9	1.2	0.2	100%
<b>Europe</b>	<b>1.5</b>	<b>0.4</b>	<b>0.7</b>	<b>0.9</b>	<b>0.6</b>	<b>71%</b>
Austria	1.4	-0.1	-0.3	0.3	0.1	79%
Belgium	1.3	0.3	1.2	0.5	-0.1	90%
Bulgaria	3.7	2.5	1.0	3.3	2.9	34%
Croatia	3.3	-0.9	-3.1	0.1	1.0	48%
Cyprus	1.5	0.0	0.2	-0.2	0.1	64%
Czech Republic	4.1	0.8	2.2	3.1	0.6	55%
Denmark	1.5	0.4	0.7	0.3	-0.4	78%
Estonia	6.1	1.2	2.0	-1.4	1.3	50%
Finland	1.9	-0.3	-0.2	0.6	0.8	75%
France	1.1	0.3	0.2	0.8	0.5	81%
Germany	1.0	0.2	0.8	0.8	0.6	75%
Greece	2.8	-1.3	0.3	-0.7	-1.3	58%
Hungary	3.7	0.1	-0.7	0.9	-0.2	50%
Iceland	2.6	0.6	0.3	0.7	3.3	71%
Ireland	2.9	1.3	6.7	1.8	2.4	108%
Italy	0.1	-0.6	0.0	0.1	-0.4	74%
Latvia	6.9	2.1	3.5	1.5	2.2	47%
Lithuania	6.7	2.8	1.5	0.5	0.5	52%
Luxembourg	0.8	-0.4	3.0	1.4	1.1	119%
Malta	2.4	0.5	3.0	3.5	1.3	70%
Netherlands	1.4	0.3	1.7	1.0	1.1	80%
Norway	1.5	-0.4	0.7	1.4	0.9	108%
Poland	4.3	2.6	1.5	2.3	2.1	54%
Portugal	1.2	0.9	-0.5	0.2	-0.2	53%
Romania	7.0	2.9	2.3	4.9	5.8	43%
Slovak Republic	4.2	2.4	1.1	1.8	0.9	60%
Slovenia	3.3	0.5	2.7	1.2	0.5	56%
Spain	0.0	1.3	0.5	0.7	0.5	73%
Sweden	2.4	0.3	1.2	2.5	1.6	83%
Switzerland	1.2	0.1	0.2	-0.7	-0.3	80%
United Kingdom	1.9	0.2	0.7	0.4	0.4	72%
Japan	2.0	0.6	-0.1	0.9	0.1	65%
<b>Other Mature</b>	<b>2.5</b>	<b>1.4</b>	<b>1.6</b>	<b>0.5</b>	<b>1.0</b>	<b>73%</b>
Australia	0.9	1.0	1.6	0.5	0.8	83%
Canada	1.2	0.5	1.9	0.1	0.7	74%
Hong Kong	3.6	1.9	2.2	1.0	1.4	92%
Israel	1.2	0.7	0.3	0.2	1.3	61%
New Zealand	1.1	0.9	-0.7	0.9	-0.6	59%
Singapore	3.8	0.4	-0.2	-0.2	1.0	110%
South Korea	4.1	2.2	1.2	1.5	1.7	60%
Taiwan	3.9	2.3	3.0	-0.4	0.8	80%
China (Alternative)	8.1	7.8	6.2	3.2	3.6	21%
China (Official)	9.1	9.6	7.4	7.2	7.0	23%
India	4.8	6.4	5.1	5.4	5.0	13%

**TABLE 9: Growth and level of labor productivity (GDP per person employed), Country Details, 1999-2016 (continued)***Annual average growth, 1999-2006, 2007-2014, 2014, 2015, 2016 and level as a % of US in 2016*

	Annual Average Growth					GDP per person employed, % of US, 2016
	1999-2006	2007-2014	2014	2015	2016	
<b>Other Developing Asia</b>	<b>3.3</b>	<b>2.9</b>	<b>4.0</b>	<b>4.2</b>	<b>3.1</b>	<b>16%</b>
Bangladesh	3.7	3.6	4.3	4.5	4.8	7%
Cambodia	5.5	3.8	5.2	5.0	5.0	5%
Indonesia	3.3	3.6	3.3	4.7	1.8	21%
Malaysia	3.1	1.3	3.5	3.4	3.6	51%
Myanmar	10.6	5.4	6.6	5.8	4.8	8%
Pakistan	1.9	0.9	4.8	3.6	2.6	15%
Philippines	1.8	3.2	4.8	3.1	2.4	16%
Sri Lanka	2.7	4.0	4.8	3.0	4.0	25%
Thailand	3.8	2.5	3.5	3.1	4.1	25%
Vietnam	4.6	3.6	4.9	6.5	5.5	9%
<b>Latin America</b>	<b>0.4</b>	<b>1.1</b>	<b>-0.6</b>	<b>-1.5</b>	<b>-1.6</b>	<b>29%</b>
Argentina	-0.2	0.8	-3.9	0.6	-3.6	35%
Barbados	1.1	0.5	0.9	-1.5	1.6	31%
Bolivia	0.1	1.7	3.3	2.5	2.0	12%
Brazil	-0.2	1.9	-2.3	-4.0	-1.8	25%
Chile	2.3	0.6	0.5	0.7	0.5	44%
Colombia	1.4	1.4	3.4	-0.2	1.0	25%
Costa Rica	1.2	2.3	1.7	5.3	7.2	34%
Dominican Republic	2.7	2.5	2.9	4.1	3.6	30%
Ecuador	-0.1	2.6	2.6	-5.0	-6.5	20%
Guatemala	-0.9	1.1	-0.9	1.1	-0.7	17%
Jamaica	-0.6	-0.3	-1.2	0.0	-1.6	18%
Mexico	0.8	0.0	2.6	0.3	1.0	37%
Peru	1.7	3.5	1.4	2.3	2.0	70%
St. Lucia	-0.2	-0.2	-0.7	0.9	0.1	23%
Trinidad & Tobago	5.9	0.2	-2.3	1.7	-5.0	57%
Uruguay	-0.4	3.2	1.0	1.4	1.7	37%
Venezuela	-0.5	-0.3	-6.8	-6.3	-17.3	27%
<b>Middle East &amp; North Africa</b>	<b>1.0</b>	<b>-0.4</b>	<b>1.3</b>	<b>-0.6</b>	<b>1.5</b>	<b>50%</b>
Algeria	-0.7	1.1	9.4	0.3	2.8	47%
Bahrain	-3.3	-0.6	4.5	2.2	1.8	73%
Egypt	2.3	-0.4	3.6	1.8	1.4	35%
Iran	1.6	0.9	3.0	-1.3	3.2	52%
Iraq	4.2	2.2	-3.3	1.5	7.0	67%
Jordan	3.6	0.2	-0.8	0.7	-0.4	40%
Kuwait	1.4	-3.1	-3.4	-2.8	0.1	120%
Morocco	0.4	1.2	1.9	4.2	0.2	18%
Oman	-0.3	-7.8	-7.8	-4.0	0.4	60%
Qatar	1.9	-3.2	-2.0	-13.4	1.0	136%
Saudi Arabia	-0.4	-0.9	0.5	0.3	-0.5	123%
Sudan	4.0	0.5	1.3	1.8	-0.4	17%
Syria	1.3	-4.7	-13.1	-12.4	-0.6	13%
Tunisia	2.3	1.7	2.9	-0.7	-0.3	31%
United Arab Emirates	0.0	-2.6	1.8	3.0	2.3	138%
Yemen	0.5	-2.4	-4.1	-30.1	-14.0	8%

**TABLE 9: Growth and level of labor productivity (GDP per person employed), Country Details, 1999-2016 (continued)***Annual average growth, 1999-2006, 2007-2014, 2014, 2015, 2016 and level as a % of US in 2016*

	Annual Average Growth					GDP per person employed, % of US, 2016
	1999-2006	2007-2014	2014	2015	2016	
<b>Sub-Saharan Africa</b>	<b>2.5</b>	<b>2.8</b>	<b>2.4</b>	<b>-0.7</b>	<b>-2.2</b>	<b>8%</b>
Angola	6.3	4.1	1.0	-0.7	-3.4	18%
Burkina Faso	2.7	2.3	0.8	0.5	2.0	3%
Cameroon	-3.6	-1.2	2.9	2.9	1.6	5%
Côte d'Ivoire	-1.9	1.5	5.7	5.8	4.6	8%
DR Congo	-1.4	3.4	6.0	3.2	-1.0	2%
Ethiopia	2.3	5.9	6.4	6.1	5.2	3%
Ghana	2.4	3.1	1.4	1.6	1.8	8%
Kenya	0.2	2.1	2.0	1.7	2.3	7%
Madagascar	0.1	-1.2	0.1	0.1	1.2	2%
Malawi	1.2	1.8	2.1	-0.4	-1.2	2%
Mali	1.7	-1.5	5.1	2.5	1.8	5%
Mozambique	5.0	5.2	7.1	2.5	-0.1	3%
Niger	-0.1	1.9	3.0	-0.3	0.7	3%
Nigeria	5.0	4.2	3.6	-2.7	-8.0	14%
Senegal	1.6	0.2	0.8	2.2	2.8	6%
South Africa	2.1	1.2	-0.2	-2.5	0.0	36%
Tanzania	2.6	3.4	2.8	4.0	3.5	5%
Uganda	4.1	1.8	1.5	1.4	1.0	4%
Zambia	3.4	3.3	1.2	-0.7	-0.6	11%
Zimbabwe	-9.3	1.8	1.6	-1.3	-2.0	3%
<b>Russia, Central Asia and Southeast Europe</b>	<b>5.8</b>	<b>2.4</b>	<b>1.6</b>	<b>-1.1</b>	<b>0.3</b>	<b>39%</b>
Albania	6.9	3.5	0.9	-2.4	-3.6	27%
Armenia	13.4	2.6	5.9	8.9	-0.6	20%
Azerbaijan	13.1	5.9	1.0	-0.4	-4.3	29%
Belarus	6.9	4.3	2.4	-2.7	-2.0	31%
Bosnia & Herzegovina	6.5	1.8	2.3	1.8	2.2	42%
Georgia	6.3	4.8	2.6	0.9	2.7	17%
Kazakhstan	6.8	3.6	5.0	-0.1	1.9	43%
Kyrgyz Republic	1.2	3.6	2.2	5.5	2.7	8%
Macedonia	1.8	0.2	1.2	1.5	0.6	31%
Moldova	8.4	4.7	3.7	-1.9	2.6	13%
Russian Federation	6.2	2.2	0.5	-3.9	-0.4	45%
Serbia & Montenegro	6.2	1.4	-10.8	0.3	-1.6	35%
Tajikistan	6.0	5.7	5.7	3.7	4.9	9%
Turkey	3.7	1.7	3.5	3.4	0.6	60%
Turkmenistan	13.3	8.5	8.3	4.3	4.4	29%
Ukraine	7.9	0.8	-0.1	-0.8	3.4	18%
Uzbekistan	3.0	5.7	5.6	6.0	6.1	13%

**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

**Notes:** Gross Domestic Product levels are expressed in 2016 US\$, converted by Purchasing Power Parities; Growth rates are based on the annual percentage of difference of each variable; Regional labor productivity growth rates are aggregated using shares in nominal PPP converted GDP; World labor productivity growth is based on estimates for all 123 countries (including China (Alternative) ) available from this list; Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates.

**TABEL 10: Contributions of Sources of Growth to Aggregate GDP Growth, Major Regions, 1999-2016**

	World					Mature					Emerging				
	99-06	07-14	2014	2015	2016	99-06	07-14	2014	2015	2016	99-06	07-14	2014	2015	2016
GDP Growth	4.1	3.2	3.3	2.6	2.5	2.9	1.2	2.0	2.1	1.8	5.6	5.2	4.3	3.0	3.1
Labor	0.5	0.3	0.6	0.7	0.5	0.3	0.0	0.8	0.8	0.6	0.8	0.6	0.4	0.6	0.5
Labor Quality	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.4	0.3	0.3	0.3	0.3
Non-IT Capital	1.7	2.2	1.9	1.8	1.7	1.1	0.8	0.7	0.7	0.6	2.5	3.5	2.9	2.7	2.5
IT Capital	0.6	0.6	0.6	0.6	0.5	0.7	0.4	0.4	0.4	0.3	0.5	0.7	0.8	0.8	0.6
TFP Growth	0.9	-0.1	0.0	-0.7	-0.5	0.6	-0.3	0.0	0.1	0.0	1.3	0.1	0.0	-1.4	-0.9
	United States					Japan					Euro Area				
	99-06	07-14	2014	2015	2016	99-06	07-14	2014	2015	2016	99-06	07-14	2014	2015	2016
GDP Growth	3.4	1.3	2.5	2.7	1.7	1.8	0.6	0.5	1.3	1.1	2.3	0.3	1.2	1.6	1.7
Labor	0.3	0.1	1.2	1.2	0.8	-0.2	-0.3	0.2	0.0	0.3	0.5	-0.2	0.3	0.6	0.6
Labor Quality	0.2	0.3	0.1	0.3	0.4	0.5	0.2	0.2	0.5	0.2	0.2	0.3	0.2	0.1	0.1
Non-IT Capital	0.9	0.6	0.7	0.7	0.5	0.9	0.4	0.5	0.4	0.5	1.1	0.6	0.4	0.4	0.5
IT Capital	0.8	0.5	0.4	0.4	0.3	0.7	0.4	0.3	0.3	0.2	0.5	0.3	0.2	0.3	0.3
TFP Growth	1.1	-0.1	0.1	0.2	-0.3	-0.1	0.0	-0.7	0.1	-0.2	0.0	-0.8	0.1	0.2	0.2
	China					India					Brazil				
	99-06	07-14	2014	2015	2016	99-06	07-14	2014	2015	2016	99-06	07-14	2014	2015	2016
GDP Growth	8.5	7.9	6.4	3.5	3.8	6.6	7.1	6.6	7.2	6.8	2.9	3.4	0.5	-3.8	-3.7
Labor	0.4	0.2	0.2	0.2	0.1	1.2	0.5	0.9	1.1	1.1	1.4	0.7	1.0	0.1	-1.0
Labor Quality	0.4	0.2	0.3	0.3	0.3	0.6	0.6	0.5	0.5	0.5	0.9	0.8	0.0	0.2	0.2
Non-IT Capital	4.7	5.4	3.9	3.9	3.8	2.6	3.5	2.9	2.8	2.4	0.8	1.9	1.7	0.9	0.5
IT Capital	1.0	1.3	1.6	1.6	1.3	0.7	1.2	0.6	0.6	0.5	0.2	0.4	0.4	0.3	0.2
TFP Growth	2.1	0.9	0.4	-2.3	-1.6	1.4	1.3	1.7	2.2	2.4	-0.4	-0.4	-2.6	-5.4	-3.6

**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

**Notes:** All growth rates are calculated as log differences. Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates; Regional aggregates are weighted using shares in nominal PPP converted GDP; Growth rates for China, as well as the regional aggregates which include China, are based on TCB alternative estimates of Chinese GDP growth. For more information, please refer to the notes in the introduction to these summary tables.

**TABLE 11: Total Factor Productivity Growth by Major Region, 1999-2016**

	1999- 2006	2007- 2014	2014	2015	2016
United States	1.1	-0.1	0.1	0.2	-0.3
Europe	0.3	-0.7	0.1	0.2	0.2
<i>of which: Euro Area</i>	0.0	-0.8	0.1	0.2	0.2
<i>of which: United Kingdom</i>	1.0	-0.7	0.3	0.1	0.2
Japan	-0.1	0.0	-0.7	0.1	-0.2
Other Mature	0.7	0.0	-0.1	-0.6	0.3
<b>Mature Economies</b>	<b>0.6</b>	<b>-0.3</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>
China	2.1	0.9	0.4	-2.3	-1.6
India	1.4	1.3	1.7	2.2	2.4
Other Developing Asia	1.5	0.3	1.1	0.8	0.3
Latin America	-0.5	-0.6	-1.7	-2.7	-3.1
<i>of which: Brazil</i>	-0.4	-0.4	-2.6	-5.4	-3.6
<i>of which: Mexico</i>	-1.3	-1.3	0.5	-0.7	-0.8
Middle East & North Africa	-0.1	-2.5	-1.4	-1.9	-0.4
Sub-Saharan Africa	1.7	0.8	0.6	-1.4	-2.8
Russia, Central Asia and Southeast Europe	3.9	0.4	-0.5	-2.7	-1.1
<b>Emerging Markets and Developing Economies</b>	<b>1.3</b>	<b>0.1</b>	<b>0.0</b>	<b>-1.4</b>	<b>-0.9</b>
<b>World</b>	<b>0.9</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.7</b>	<b>-0.5</b>
<b>Addenda:</b>					
EU-28	0.3	-0.7	0.1	0.3	0.3
OECD	0.5	-0.4	0.0	0.0	-0.2

**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

**Notes:** Please refer to the notes at the beginning of this document for a list of countries included in the regional aggregates; This table is based on estimates for 123 countries (see table 9 for a full list of countries); Total Factor Productivity Growth (TFP) measures the growth of GDP over the combined contributions of total hours, workforce skills, machinery and structures and IT capital; Growth rates are calculated as log differences; Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates; Regional aggregates are weighted using shares in nominal PPP converted GDP.

**TABLE 12: Total Factor Productivity Growth, Country Details, 1999-2016**

	1999-2006	2007-2014	2014	2015	2016
<b>World</b>	<b>0.9</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.7</b>	<b>-0.5</b>
United States	1.1	-0.1	0.1	0.2	-0.3
<b>Europe</b>	<b>0.3</b>	<b>-0.7</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>
Austria	0.4	-0.4	-0.6	0.2	0.0
Belgium	-0.1	-0.8	-0.1	-0.1	-0.7
Bulgaria	-0.4	-0.9	-0.7	1.6	1.7
Croatia	-1.3	-3.4	-3.3	0.7	0.2
Cyprus	1.0	-1.8	-0.1	0.9	-0.5
Czech Republic	1.6	-1.3	0.6	2.6	-0.4
Denmark	0.1	-0.7	0.5	-0.3	-0.5
Estonia	0.4	-1.5	0.6	-1.5	-0.1
Finland	1.2	-1.2	-1.2	-0.5	0.1
France	0.4	-0.8	-0.4	-0.3	0.1
Germany	0.3	-0.3	0.2	0.4	0.7
Greece	1.2	-2.6	2.5	-0.5	-0.8
Hungary	1.8	-1.1	0.2	0.8	0.4
Iceland	1.1	1.1	0.4	0.8	3.1
Ireland	0.1	-1.0	5.2	0.2	-1.0
Italy	-0.6	-1.1	0.0	0.0	-0.3
Latvia	4.9	-0.9	2.2	2.0	1.1
Lithuania	0.6	-1.2	-0.2	-2.6	-1.7
Luxembourg	0.6	-2.0	0.7	2.8	1.2
Malta	0.9	0.2	4.7	2.1	-0.1
Netherlands	0.4	-0.6	0.5	0.8	0.2
Norway	-0.2	-1.9	-0.7	-0.1	-0.5
Poland	1.6	0.2	-0.4	0.4	0.4
Portugal	-0.5	-1.2	-1.7	-0.2	0.5
Romania	3.0	-0.1	2.3	0.7	2.9
Slovak Republic	2.3	0.8	1.0	1.0	0.1
Slovenia	-0.6	-1.7	1.3	-0.2	0.3
Spain	-1.0	-0.9	-0.3	0.7	0.8
Sweden	1.1	-0.9	0.5	1.7	0.4
Switzerland	-0.3	-0.7	-0.7	-2.5	-1.4
United Kingdom	1.0	-0.7	0.3	0.1	0.2
Japan	-0.1	0.0	-0.7	0.1	-0.2
<b>Other Mature</b>	<b>0.7</b>	<b>0.0</b>	<b>-0.1</b>	<b>-0.6</b>	<b>0.3</b>
Australia	-0.2	-0.6	0.1	-0.5	0.7
Canada	0.1	-0.6	0.9	-0.9	0.0
Hong Kong	1.5	0.2	1.2	-0.5	-0.3
Israel	0.2	-0.1	-0.1	-0.6	0.5
New Zealand	0.8	0.1	-1.1	0.5	-0.4
Singapore	1.5	-1.1	-2.0	-1.1	-1.1
South Korea	1.4	0.5	-1.6	-0.2	0.6
Taiwan	0.9	1.0	1.2	-1.1	0.9
China (Alternative)	2.1	0.9	0.4	-2.3	-1.6
China (Official)	4.3	4.6	3.5	3.3	3.4
India	1.4	1.3	1.7	2.2	2.4



**TABLE 12: Total Factor Productivity Growth, Country Details, 1999-2016 (continued)**

	1999-2006	2007-2014	2014	2015	2016
<b>Other Developing Asia</b>	<b>1.5</b>	<b>0.3</b>	<b>1.1</b>	<b>0.8</b>	<b>0.3</b>
Bangladesh	5.7	6.0	6.3	6.7	6.8
Cambodia	0.5	-0.8	1.7	0.3	0.4
Indonesia	0.6	0.5	0.7	0.9	-0.3
Malaysia	1.2	-0.9	-0.4	-0.5	-0.7
Myanmar	5.1	-3.1	-0.6	-1.2	-2.0
Pakistan	2.2	-1.6	0.0	-0.3	-0.6
Philippines	0.8	1.4	2.7	0.7	-0.7
Sri Lanka	0.2	1.1	0.5	0.5	0.6
Thailand	2.9	0.3	0.4	0.4	1.2
Vietnam	-1.7	-0.8	2.9	1.2	1.0
<b>Latin America</b>	<b>-0.5</b>	<b>-0.6</b>	<b>-1.7</b>	<b>-2.7</b>	<b>-3.1</b>
Argentina	1.0	0.6	-3.7	0.4	-4.1
Barbados	-2.5	-1.3	0.3	-0.8	0.8
Bolivia	-1.3	-1.3	0.8	-1.4	-2.0
Brazil	-0.4	-0.4	-2.6	-5.4	-3.6
Chile	-1.3	-2.6	-2.2	-2.0	-2.1
Colombia	-0.5	-0.6	0.8	-0.8	-1.2
Costa Rica	-1.4	0.5	-0.2	2.6	2.1
Dominican Republic	0.6	0.5	2.5	2.3	2.2
Ecuador	0.2	0.3	1.5	-5.5	-6.3
Guatemala	-1.5	0.7	0.1	1.0	-0.5
Jamaica	-0.6	-0.9	-1.2	-0.1	-0.8
Mexico	-1.3	-1.3	0.5	-0.7	-0.8
Peru	0.7	-0.3	-2.6	-1.0	-0.2
St. Lucia	-2.5	-3.1	-0.6	0.6	-0.4
Trinidad & Tobago	5.1	0.9	-1.0	0.6	-4.7
Uruguay	0.1	2.7	0.5	0.2	0.2
Venezuela	0.2	-1.2	-6.4	-6.3	-16.9
<b>Middle East &amp; North Africa</b>	<b>-0.1</b>	<b>-2.5</b>	<b>-1.4</b>	<b>-1.9</b>	<b>-0.4</b>
Algeria	-0.1	-1.2	3.3	-1.2	0.9
Bahrain	-1.1	-2.8	-0.3	-0.7	-1.1
Egypt	-0.1	-1.6	2.2	0.6	0.3
Iran	0.0	-1.9	0.8	-2.3	2.2
Iraq	7.6	4.1	-2.5	1.5	6.1
Jordan	2.8	-0.1	-0.6	0.4	-0.3
Kuwait	0.7	-6.1	-6.3	-4.3	-3.6
Morocco	-0.2	-0.9	-0.6	1.4	-1.9
Oman	-2.9	-6.4	-7.4	-4.2	-3.9
Qatar	-2.5	-4.3	-4.9	-6.3	-3.4
Saudi Arabia	-2.3	-4.9	-4.6	-2.6	-3.4
Sudan	-1.2	-2.4	0.4	0.7	-1.0
Syria	-0.4	-6.6	-13.7	-12.3	2.7
Tunisia	0.5	-0.4	0.6	-1.5	-1.2
United Arab Emirates	1.8	-3.5	-1.5	-1.0	-0.6
Yemen	-0.6	-4.4	-5.3	-33.3	-12.3

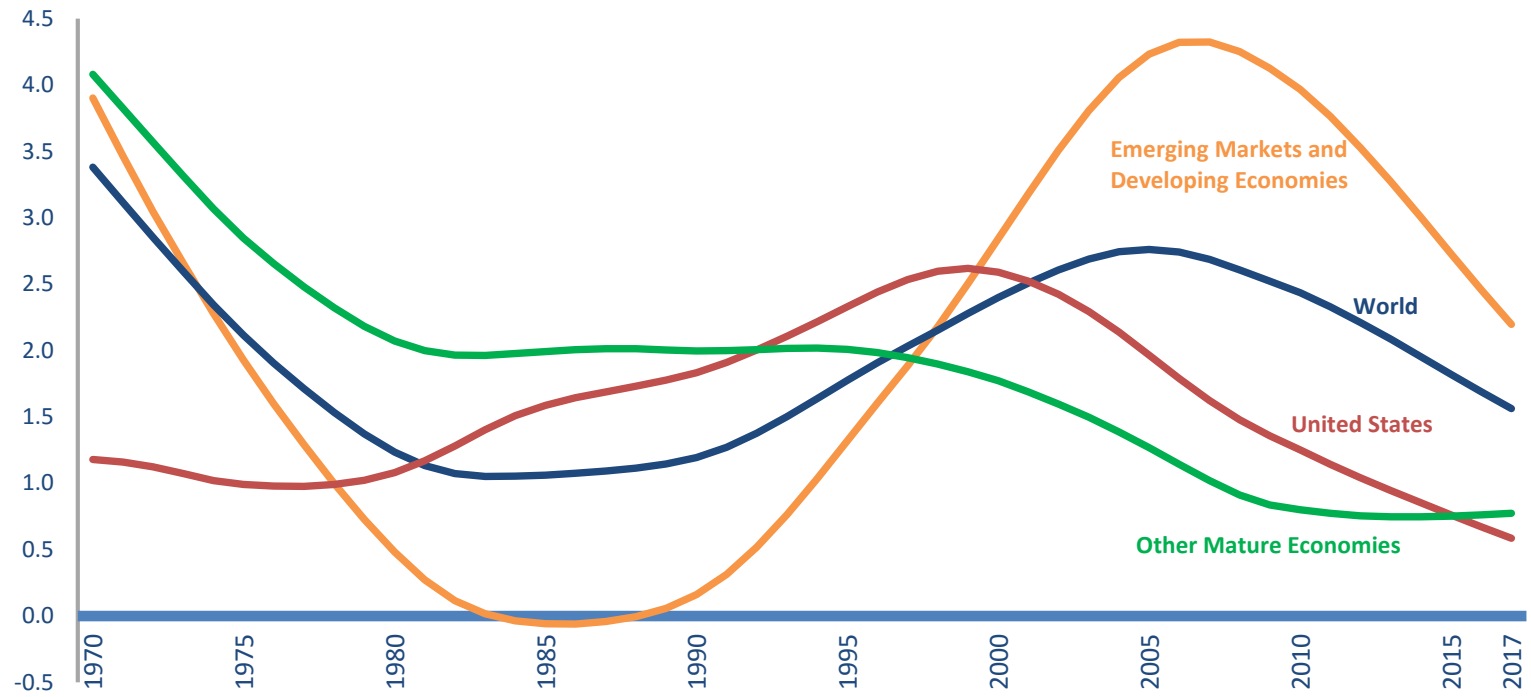
**TABLE 12: Total Factor Productivity Growth, Country Details, 1999-2016 (continued)**

	1999-2006	2007-2014	2014	2015	2016
<b>Sub-Saharan Africa</b>	<b>1.7</b>	<b>0.8</b>	<b>0.6</b>	<b>-1.4</b>	<b>-2.8</b>
Angola	6.1	1.9	-0.8	2.1	-1.2
Burkina Faso	2.0	-1.2	-3.8	-3.4	-1.6
Cameroon	-1.6	-1.0	1.5	1.3	0.0
Côte d'Ivoire	-1.0	1.7	4.9	4.8	3.3
DR Congo	0.9	4.9	7.1	4.9	1.2
Ethiopia	1.3	1.3	-1.2	-1.9	-1.8
Ghana	1.0	-1.0	-1.0	-0.7	0.1
Kenya	-0.1	0.4	-0.1	0.4	0.3
Madagascar	-0.2	-2.5	-0.3	-0.1	0.0
Malawi	0.1	2.2	3.2	0.0	-1.3
Mali	1.5	-0.2	5.3	3.0	3.4
Mozambique	3.4	1.4	0.3	0.1	-0.7
Niger	-0.1	0.6	1.7	-1.5	-0.5
Nigeria	3.2	2.7	1.9	-2.7	-6.8
Senegal	-0.4	-1.7	-1.0	0.9	0.7
South Africa	1.5	-0.8	-0.9	-2.2	-1.0
Tanzania	1.3	-1.8	-1.1	-1.0	-1.2
Uganda	1.5	-2.0	-1.4	-1.4	-1.8
Zambia	2.6	2.8	0.1	-4.9	-3.2
Zimbabwe	-9.3	2.2	1.1	-1.1	-2.4
<b>Russia, Central Asia and Southeast Europe</b>	<b>3.9</b>	<b>0.4</b>	<b>-0.5</b>	<b>-2.7</b>	<b>-1.1</b>
Albania	3.4	0.5	-1.2	-2.2	-2.3
Armenia	7.9	-1.5	2.0	3.8	-2.0
Azerbaijan	1.8	-1.5	-3.4	-3.1	-8.1
Belarus	7.5	1.2	0.3	-4.2	-2.5
Bosnia & Herzegovina	1.5	0.0	0.2	1.3	1.0
Georgia	4.5	2.9	1.0	-1.0	-0.3
Kazakhstan	5.0	0.0	0.7	-3.2	-1.8
Kyrgyz Republic	0.8	1.4	-0.3	1.7	-0.2
Macedonia	-1.0	-2.3	-0.6	-1.1	-2.0
Moldova	5.5	2.1	2.5	-3.1	1.5
Russian Federation	5.2	1.0	-0.6	-4.0	-0.6
Serbia & Montenegro	0.8	-2.4	-9.4	-1.9	-1.6
Tajikistan	7.5	6.0	5.8	5.0	5.9
Turkey	0.0	-0.7	-0.1	-0.1	-2.4
Turkmenistan	9.4	2.3	2.9	-0.2	0.1
Ukraine	6.1	-0.5	-2.8	-5.2	3.3
Uzbekistan	1.7	3.2	2.9	3.1	3.1

**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

Notes: Total Factor Productivity Growth (TFP) measures the growth of GDP over the combined contributions of total hours, workforce skills, machinery and structures and IT capital; Growth rates are calculated as log differences; Growth rates for 1999-2006 and 2007-2014 are the averages of yearly growth rates; Regional aggregates are weighted using shares in nominal PPP converted GDP.

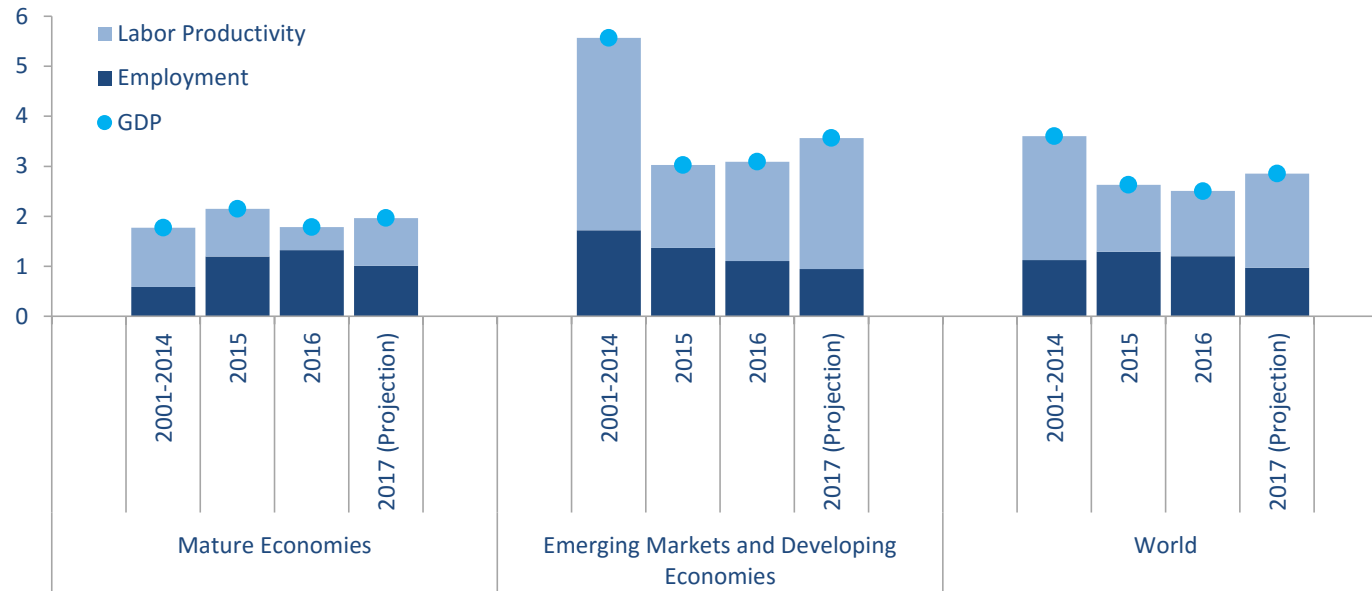
**CHART 1: Trend growth of Labor productivity (output per person) using HP filter, Major Regions, 1970-2017**



**Source:** *The Conference Board Total Economy Database™ (Adjusted version), May 2017.*

**Notes:** Trend growth rates are obtained using HP filter, assuming a  $\lambda=100$ .

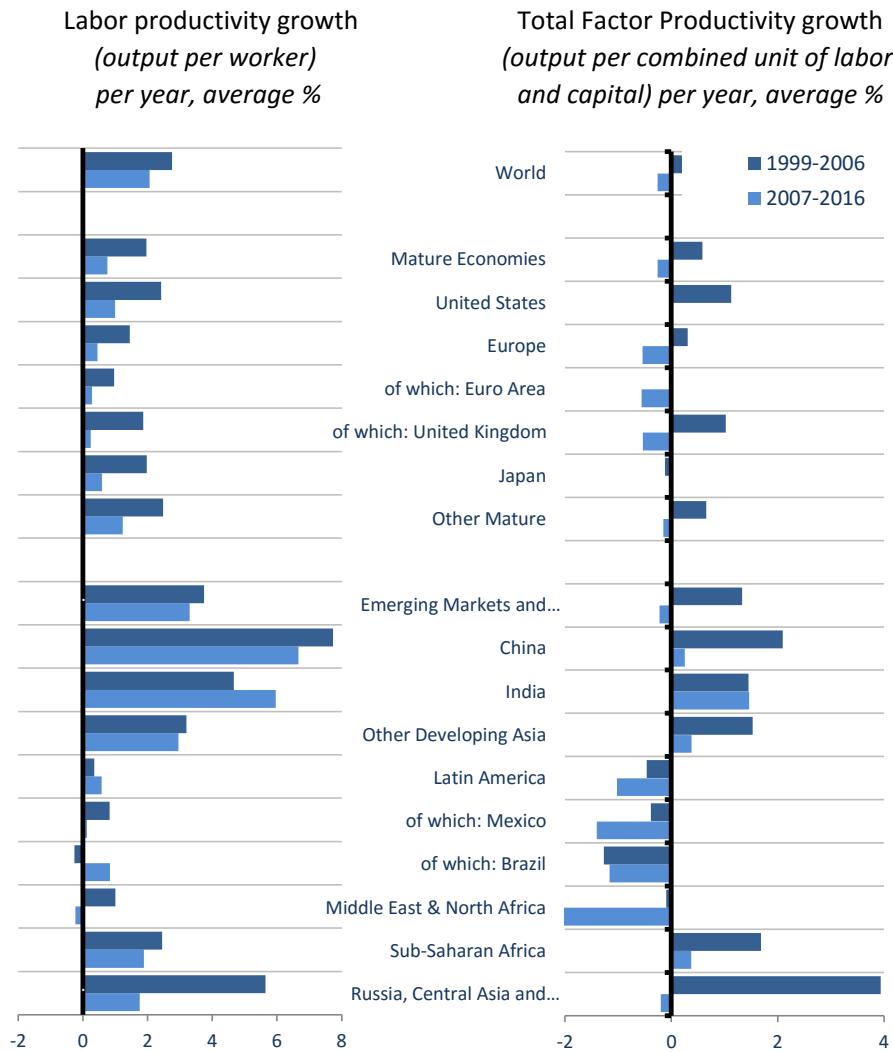
**CHART 2: Contribution of Labor Productivity and Employment to GDP growth, Major Regions, 2000-2017**



**Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.**

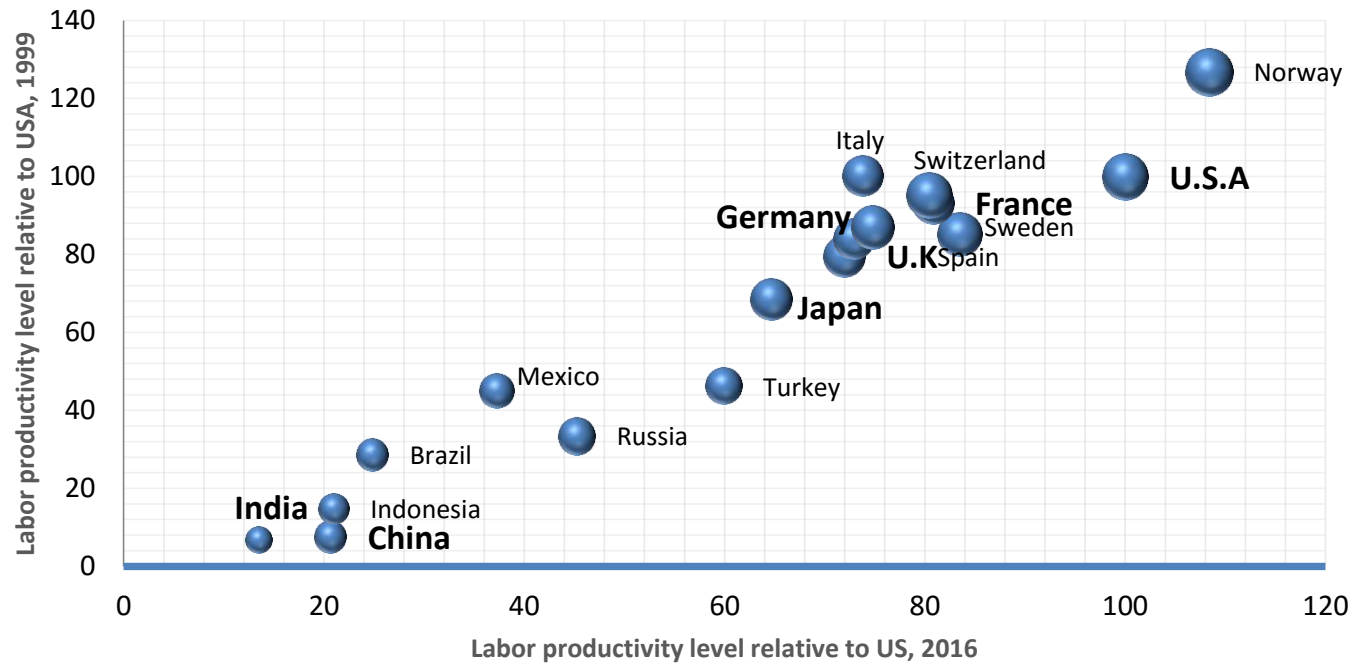
**Notes:** GDP growth (measured in log differences) is the sum of growth in employment and output per worker.

**CHART 3: Growth of Labor Productivity and TFP, Major Regions, 1999-2016**



Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.

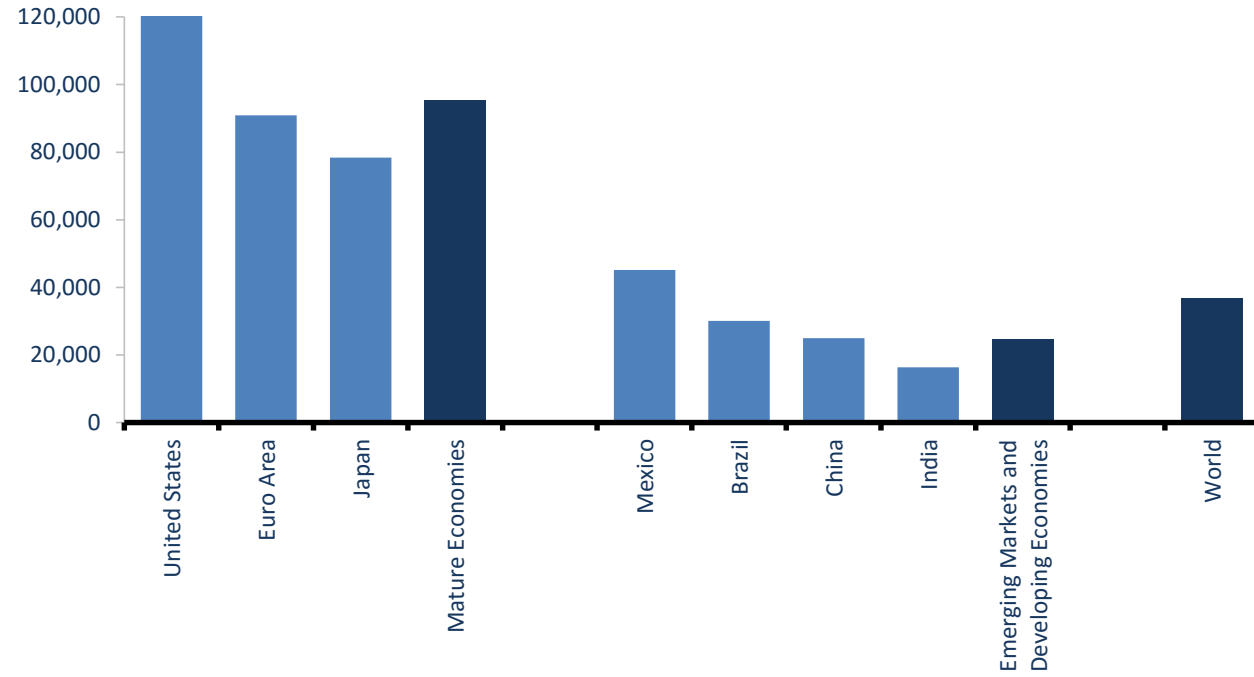
**CHART 4: Comparison of Overall Productivity Levels, Selected Countries, 1999 and 2016**



**Source:** *The Conference Board Total Economy Database™ (Adjusted version), May 2017.*

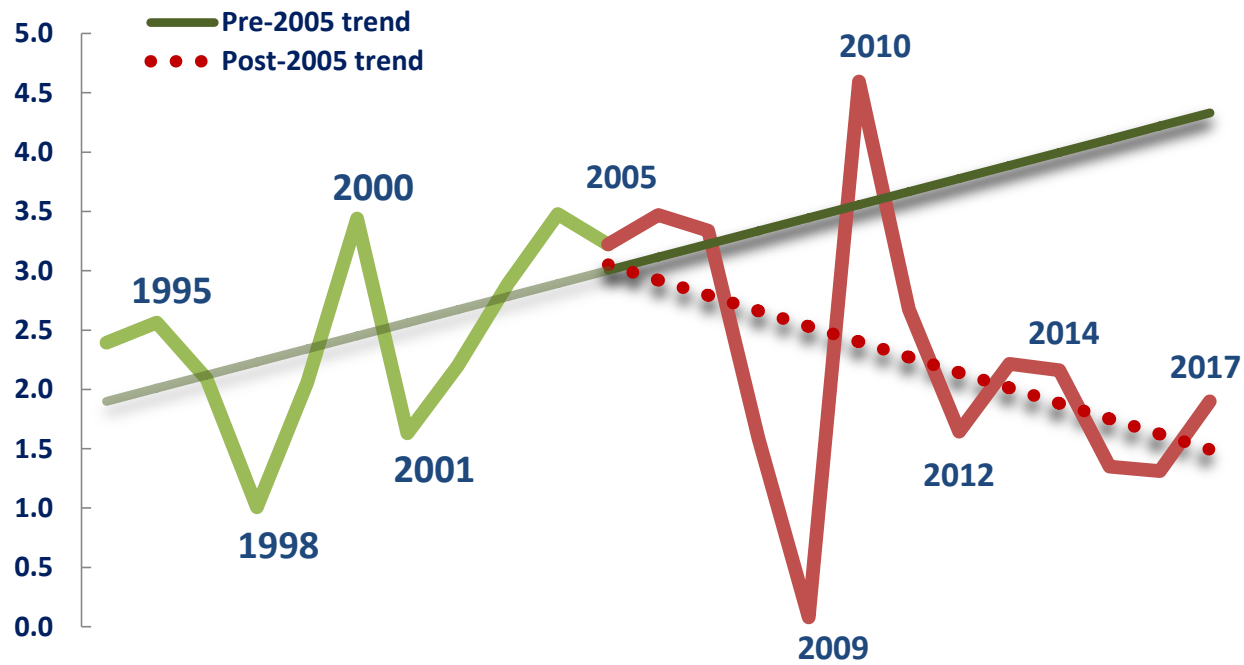
**Notes:** Labor productivity is measured here as output per worker; The size of the bubble represents per capita income in 2016.

**CHART 5: Output (value added) per person employed in US\$, corrected for differences in price levels, Major Regions, 2016**



*Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.*

CHART 6: Growth of Labor Productivity, World, Actual, Pre-2005 and Post-2005 Trend, 1995-2017



Source: The Conference Board Total Economy Database™ (Adjusted version), May 2017.

Notes: Labor productivity is measured here as output per worker; Growth rates are presented as percent changes.