



## 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 ten countries 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, 2014-2016
- 2 Contribution to Growth in World GDP, Employment and GDP per Person Employed by Major Region, 2014-2016
- 3 Growth of Labor Productivity, Total Hours Worked and Real GDP for Major Mature Economies, 1999-2016
- 4 Growth of Labor Productivity, Persons Employed and Real GDP for Major Emerging Economies, 1999-2016
- 5 Growth of Labor Productivity (GDP per hour, annual average, percent), Country Details, 1999-2016
- 6 Growth of Total Hours Worked (annual average, percent), Country Details, 1999-2016
- 7 Growth of Real GDP (annual average, percent), Country Details, 1999-2016
- 8 Labor Productivity and Per Capita Income Levels and the Effects of Working Hours and Labor Utilization, 2015
- 9 Growth and level of labor productivity (GDP per person employed), Country Details, 1999-2015
- 10 Contributions of Sources of Growth to Aggregate GDP Growth, Major Regions, 1999-2015
- 11 Total Factor Productivity Growth by Major Region, 1999-2015
- 12 Total Factor Productivity Growth, Country Details, 1999-2015

## Charts

- 1 Trend growth of Labor productivity (output per person) using HP filter, Major Regions, 1971-2015
- 2 Contribution of Labor Productivity and Employment to GDP growth, Major Regions, 2000-2016
- 3 Growth of Labor Productivity and TFP, Major Regions, 1999-2015
- 4 Comparison of Overall Productivity Levels, Selected Countries, 1999 and 2015
- 5 Output (value added) per person employed in US\$, corrected for differences in price levels, Major Regions, 2015
- 6 Growth of Labor Productivity, World, Actual, Pre-2005 and Post-2005 Trend, 1995-2015

## 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, Croatia, 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.

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**TABLE 1: Growth of GDP, Employment and GDP per Person Employed by Major Region, 2014-2016**

	2014			2015			2016 (Projection)		
	GDP	Employ- ment	GDP per Person Employed	GDP	Employ- ment	GDP per Person Employed	GDP	Employ- ment	GDP per Person Employed
United States	2.6	1.6	1.0	2.8	1.7	1.1	1.6	1.7	-0.1
Europe	1.5	1.0	0.5	2.0	1.1	0.9	1.7	0.9	0.8
<i>of which: Euro Area</i>	0.9	0.6	0.4	1.7	1.0	0.7	1.5	1.0	0.4
Japan	0.2	0.6	-0.4	1.0	0.4	0.6	0.9	0.1	0.8
Other Mature	3.5	1.5	2.0	2.9	1.3	1.5	3.0	0.7	2.3
<b>Mature Economies</b>	<b>2.0</b>	<b>1.2</b>	<b>0.8</b>	<b>2.3</b>	<b>1.2</b>	<b>1.0</b>	<b>1.8</b>	<b>1.0</b>	<b>0.7</b>
China	6.2	0.4	5.8	4.2	0.5	3.7	3.9	0.2	3.8
India	7.0	1.7	5.3	7.3	2.0	5.2	6.8	1.9	4.8
Other Developing Asia	5.1	1.2	4.1	5.3	1.1	4.2	5.4	1.6	3.8
Latin America	1.1	1.4	-0.1	-0.2	1.2	-1.5	-0.8	1.1	-2.0
<i>of which: Brazil</i>	0.1	1.5	-1.3	-3.9	0.2	-4.1	-3.8	0.4	-4.2
<i>of which: Mexico</i>	2.3	0.4	1.9	2.5	2.4	0.1	2.4	2.0	0.4
Middle East & North Africa	2.7	1.0	1.2	2.7	1.8	0.6	3.7	1.9	1.9
Sub-Saharan Africa	5.1	2.8	2.5	3.7	3.7	-0.4	2.5	2.8	0.2
Russia, Central Asia and Southeast Europe	1.1	-0.1	0.8	-1.3	0.1	-2.1	0.2	0.0	0.2
<b>Emerging Markets and Developing Economies</b>	<b>4.2</b>	<b>1.1</b>	<b>3.2</b>	<b>3.2</b>	<b>1.4</b>	<b>1.8</b>	<b>3.2</b>	<b>1.2</b>	<b>2.2</b>
<b>World</b>	<b>3.2</b>	<b>1.1</b>	<b>2.1</b>	<b>2.8</b>	<b>1.3</b>	<b>1.5</b>	<b>2.6</b>	<b>1.2</b>	<b>1.5</b>
<b>Addenda:</b>									
EU-15	1.2	0.9	0.4	1.8	1.2	0.7	1.5	1.1	0.5
EU-13	2.7	1.5	1.2	3.4	1.1	2.2	2.8	0.6	2.2
EU-28	1.4	1.0	0.5	2.1	1.1	0.9	1.7	1.0	0.7
OECD	2.0	1.2	0.8	2.3	1.4	0.9	1.8	1.2	0.5

**Source:** *The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**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, 2014-2016**

	2014			2015			2016 (Projection)		
	GDP	Employ- ment	GDP per Person Employed	GDP	Employ- ment	GDP per Person Employed	GDP	Employ- ment	GDP per Person Employed
United States	0.42	0.08	0.16	0.44	0.08	0.17	0.26	0.08	-0.01
Europe	0.27	0.08	0.09	0.36	0.09	0.16	0.30	0.07	0.14
<i>of which: Euro Area</i>	0.11	0.03	0.05	0.21	0.05	0.09	0.18	0.05	0.05
Japan	0.01	0.01	-0.02	0.04	0.01	0.03	0.04	0.00	0.04
Other Mature	0.22	0.04	0.13	0.19	0.03	0.10	0.19	0.02	0.15
<b>Mature Economies</b>	<b>0.92</b>	<b>0.21</b>	<b>0.36</b>	<b>1.04</b>	<b>0.21</b>	<b>0.45</b>	<b>0.80</b>	<b>0.17</b>	<b>0.31</b>
China	0.95	0.09	0.89	0.66	0.12	0.59	0.63	0.04	0.61
India	0.44	0.26	0.34	0.48	0.31	0.34	0.47	0.31	0.33
Other Developing Asia	0.36	0.16	0.28	0.38	0.15	0.30	0.39	0.22	0.28
Latin America	0.09	0.11	-0.01	-0.02	0.10	-0.13	-0.07	0.09	-0.16
<i>of which: Brazil</i>	0.00	0.05	-0.04	-0.12	0.01	-0.12	-0.11	0.01	-0.12
<i>of which: Mexico</i>	0.04	0.01	0.04	0.05	0.04	0.00	0.05	0.03	0.01
Middle East & North Africa	0.18	0.04	0.08	0.19	0.08	0.04	0.25	0.08	0.13
Sub-Saharan Africa	0.14	0.27	0.07	0.10	0.35	-0.01	0.07	0.28	0.00
Russia, Central Asia and Southeast Europe	0.07	0.00	0.05	-0.08	0.01	-0.14	0.01	0.00	0.01
<b>Emerging Markets and Developing Economies</b>	<b>2.24</b>	<b>0.93</b>	<b>1.71</b>	<b>1.70</b>	<b>1.13</b>	<b>1.00</b>	<b>1.76</b>	<b>1.01</b>	<b>1.21</b>
<i>Reallocation effect</i>							-0.04		-0.15
<b>World</b>	<b>3.15</b>	<b>1.14</b>	<b>2.07</b>	<b>2.74</b>	<b>1.34</b>	<b>1.45</b>	<b>2.55</b>	<b>1.18</b>	<b>1.52</b>
<i>Addenda:</i>									
EU-15	0.19	0.05	0.06	0.27	0.07	0.10	0.23	0.06	0.07
EU-13	0.06	0.02	0.03	0.08	0.02	0.05	0.07	0.01	0.05
EU-28	0.25	0.07	0.08	0.35	0.08	0.16	0.29	0.07	0.12
OECD	0.92	0.22	0.36	1.08	0.27	0.43	0.81	0.23	0.25

**Source:** *The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**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, 1999-2016**

	United States	Japan	United Kingdom	Euro Area	EU-28
<i>Labor Productivity Growth (GDP per hour, annual average, percent)</i>					
1999-2006	2.8	2.2	2.3	1.5	1.9
2007-2013	1.3	1.3	0.2	0.6	0.7
2013	0.4	1.5	0.3	1.0	1.0
2014	0.7	-0.1	0.1	0.3	0.4
2015	0.7	0.6	0.7	0.6	0.8
2016 (Projection)	-0.3	0.8	-0.1	0.3	0.5
<i>Growth in Total Hours Worked (annual average, percent)</i>					
1999-2006	0.6	-0.6	0.7	0.9	0.5
2007-2013	-0.2	-0.6	0.4	-0.6	-0.4
2013	1.2	-0.1	1.8	-1.5	-0.7
2014	1.9	0.3	2.8	0.6	1.1
2015	2.1	0.4	1.6	1.2	1.3
2016 (Projection)	1.9	0.1	1.8	1.2	1.2
<i>Real GDP Growth (annual average, percent)</i>					
1999-2006	3.4	1.6	3.0	2.3	2.6
2007-2013	1.1	0.6	0.7	0.2	0.4
2013	1.6	1.5	2.2	-0.3	0.2
2014	2.6	0.2	2.9	0.9	1.4
2015	2.8	1.0	2.3	1.7	2.1
2016 (Projection)	1.6	0.9	1.7	1.5	1.7

**Source:** *The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**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 2007-2013 are the averages of yearly growth rates.

**TABLE 4: Growth of Labor Productivity, Persons Employed and Real GDP for Major Emerging Economies, 1999-2016**

	Major Emerging Economies*	Brazil	Russian Federation	India (Alternative)	China (Official)	South Africa	Mexico	Indonesia	Turkey
<i>Labor Productivity Growth (GDP per person, annual average, percent)</i>									
1999-2006	4.4	-0.3	4.7	3.2	8.0	9.2	2.1	1.3	3.2
2007-2013	5.3	2.0	2.2	7.3	8.1	10.1	1.4	-0.3	3.4
2013	4.2	1.6	1.5	5.1	6.0	7.8	-0.8	0.8	3.8
2014	3.8	-1.3	0.5	5.3	5.8	7.2	-0.4	1.9	3.3
2015	2.1	-4.1	-4.8	5.2	3.7	7.0	-2.6	0.1	4.6
2016 (Projection)	2.5	-4.2	0.1	4.8	3.8	6.7	-1.5	0.4	3.8
<i>Growth in Persons Employed (annual average, percent)</i>									
1999-2006	1.9	3.2	2.1	3.5	1.0	0.7	1.7	1.8	1.1
2007-2013	0.7	1.8	0.5	0.2	0.5	0.4	1.1	2.4	2.4
2013	0.8	1.1	-0.2	1.2	0.4	0.4	3.1	0.6	1.8
2014	0.9	1.5	0.2	1.7	0.4	0.4	1.9	0.4	1.7
2015	1.0	0.2	1.1	2.0	0.5	0.3	3.9	2.4	0.2
2016 (Projection)	0.8	0.4	-1.3	1.9	0.2	0.2	1.6	2.0	1.2
<i>Real GDP Growth (annual average, percent)</i>									
1999-2006	6.4	2.9	6.9	6.8	9.1	10.0	3.9	3.1	4.3
2007-2013	6.3	3.8	2.7	7.5	8.7	10.5	2.5	2.0	5.9
2013	5.0	2.7	1.3	6.3	6.4	8.2	2.2	1.4	5.6
2014	4.7	0.1	0.7	7.0	6.2	7.6	1.5	2.3	5.0
2015	3.2	-3.9	-3.7	7.3	4.2	7.3	1.3	2.5	4.8
2016 (Projection)	3.2	-3.8	-1.2	6.8	3.9	6.8	0.1	2.4	5.0

**Source:** *The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**Notes:** The Major Emerging Markets aggregate is based on China (Alternative). For more information, please refer to the notes in the introduction to this productivity brief; 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 2007-2013 are the averages of yearly growth rates.

TABLE 5: Growth of Labor Productivity (GDP per hour, annual average, percent), Country Details, 1999-2016

	1999-2006	2007-2013	2013	2014	2015	2016 (Projection)
United States	2.8	1.3	0.4	0.7	0.7	-0.3
Japan	2.2	1.3	1.5	-0.1	0.6	0.8
<b>Euro Area</b>	<b>1.5</b>	<b>0.6</b>	<b>1.0</b>	<b>0.3</b>	<b>0.6</b>	<b>0.3</b>
Austria	1.8	0.9	0.8	-0.1	0.4	0.6
Belgium	1.4	0.3	0.5	0.9	0.6	0.4
Cyprus	2.0	0.4	1.6	0.4	0.9	0.8
Estonia	5.5	2.3	1.4	2.5	-1.3	3.1
Finland	2.4	0.1	0.6	0.0	0.7	0.4
France	1.9	0.4	1.7	-0.1	0.9	0.4
Germany	1.6	0.7	0.7	0.4	0.5	0.1
Greece	2.7	-1.0	0.1	2.4	-3.0	-1.8
Ireland	5.4	2.3	-1.2	3.5	5.9	3.8
Italy	0.5	0.0	0.9	-0.4	-0.1	0.0
Luxembourg	1.2	-0.3	3.2	1.1	2.4	0.7
Malta	3.0	1.4	1.2	0.8	3.3	1.7
Netherlands	1.8	0.2	0.3	0.8	1.1	0.3
Portugal	1.3	1.2	1.2	-0.8	-0.1	1.5
Slovak Republic	4.5	2.6	3.2	1.8	1.9	0.9
Slovenia	3.8	0.4	-0.9	1.2	1.5	0.9
Spain	0.2	1.7	1.6	0.3	0.7	0.0
<b>Other Europe</b>	<b>3.0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.6</b>	<b>1.2</b>	<b>1.1</b>
Bulgaria	3.7	2.6	1.7	1.2	2.6	1.7
Czech Republic	4.6	0.9	-0.1	1.0	2.4	1.4
Denmark	1.4	0.2	-1.7	0.4	0.2	0.3
Hungary	4.0	0.9	1.4	0.0	0.5	0.6
Iceland	2.8	1.8	1.3	-0.6	-0.1	1.2
Latvia	7.4	1.8	1.0	3.2	3.2	2.4
Lithuania	6.1	3.3	3.1	1.4	-1.1	2.5
Norway	2.0	-0.5	0.6	0.7	1.0	0.3
Poland	4.6	3.0	1.5	1.2	2.1	2.2
Romania	6.9	3.4	4.7	2.0	4.2	4.1
Sweden	2.9	0.1	0.9	0.7	2.2	1.7
Switzerland	1.4	0.7	1.4	0.6	-0.7	2.7
United Kingdom	2.3	0.2	0.3	0.1	0.7	-0.1
<b>Other Mature</b>	<b>3.7</b>	<b>2.8</b>	<b>2.8</b>	<b>1.6</b>	<b>1.3</b>	<b>2.3</b>
Australia	1.6	1.4	1.5	1.9	0.8	2.0
Canada	2.3	1.2	1.2	2.1	0.4	1.4
Hong Kong	3.4	2.3	1.5	2.0	1.0	1.9
Israel	1.6	0.8	1.0	0.7	0.1	0.5
New Zealand	1.3	1.2	-0.5	-0.6	2.0	2.3
Singapore	9.4	4.9	3.3	4.1	4.8	4.7
South Korea	6.3	5.2	6.5	-0.1	1.4	3.8
Taiwan	4.8	3.4	1.4	2.5	1.6	1.0

Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.

**Notes:** Growth rates are based on the annual percentage of difference of each variable; Regional labor productivity growth r aggregated using shares in nominal PPP converted GDP; Growth rates for 1999-2006 and 2007-2013 are the averages of yearl

**TABLE 6: Growth of Total Hours Worked (annual average, percent), Country Details, 1999-2016**

	1999-2006	2007-2013	2013	2014	2015	2016 (Projection)
United States	0.6	-0.2	1.2	1.9	2.1	1.9
Japan	-0.6	-0.6	-0.1	0.3	0.4	0.1
<b>Euro Area</b>	<b>0.9</b>	<b>-0.6</b>	<b>-1.5</b>	<b>0.6</b>	<b>1.2</b>	<b>1.2</b>
Austria	0.5	0.1	-0.5	0.4	0.4	0.8
Belgium	0.9	0.6	-0.5	0.5	0.8	0.8
Cyprus	2.0	-0.4	-7.4	-2.9	0.7	1.0
Estonia	1.3	-1.9	0.2	0.4	2.4	-1.1
Finland	1.0	-0.1	-1.4	-0.7	-0.1	0.4
France	0.3	0.2	-1.1	0.2	0.4	0.5
Germany	-0.2	0.3	-0.4	1.2	1.2	1.4
Greece	1.3	-2.9	-3.2	-1.7	2.7	1.6
Ireland	3.3	-1.7	2.9	2.1	2.5	1.8
Italy	1.0	-1.1	-2.6	0.1	0.9	0.9
Luxembourg	3.3	2.2	1.2	2.9	2.4	3.0
Malta	-0.1	1.1	2.8	2.9	2.9	2.4
Netherlands	0.6	0.2	-0.8	0.2	0.8	1.5
Portugal	0.4	-2.0	-2.3	1.8	1.6	-0.3
Slovak Republic	-0.2	0.4	-1.7	0.7	1.7	2.2
Slovenia	0.3	-0.4	-0.2	1.9	1.4	0.8
Spain	3.6	-2.2	-3.2	1.1	2.5	2.6
<b>Other Europe</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.5</b>	<b>2.0</b>	<b>1.3</b>	<b>1.0</b>
Bulgaria	0.5	-0.8	-0.4	0.3	0.4	0.3
Czech Republic	-0.6	0.0	-0.4	1.0	1.8	1.0
Denmark	0.7	-0.6	1.5	0.9	0.9	0.8
Hungary	0.1	-1.3	0.4	3.7	2.4	1.1
Iceland	1.4	-0.4	3.0	2.6	4.1	2.8
Latvia	0.2	-1.9	2.0	-0.8	-0.5	0.3
Lithuania	0.0	-1.6	0.5	1.6	2.7	0.3
Norway	0.4	1.5	0.4	1.5	0.6	0.3
Poland	-0.7	0.6	-0.3	2.1	1.6	0.8
Romania	-2.0	-1.7	-1.2	1.0	-0.4	0.1
Sweden	0.5	0.9	0.4	1.5	1.6	1.7
Switzerland	0.8	1.0	0.4	1.3	1.5	-1.4
United Kingdom	0.7	0.4	1.8	2.8	1.6	1.8
<b>Other Mature</b>	<b>1.4</b>	<b>0.6</b>	<b>0.0</b>	<b>2.2</b>	<b>1.8</b>	<b>0.7</b>
Australia	1.7	1.3	0.6	0.7	1.7	0.6
Canada	1.6	0.8	0.9	0.9	1.1	0.8
Hong Kong	1.4	0.8	1.5	0.7	1.3	-0.8
Israel	1.9	2.9	2.3	2.0	2.4	1.9
New Zealand	2.4	0.5	2.2	3.6	1.3	0.7
Singapore	1.9	4.1	2.4	0.3	2.0	1.7
South Korea	1.2	-0.6	-2.4	4.3	3.1	0.6
Taiwan	0.7	0.6	1.0	1.5	-0.4	0.4

*Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**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 2007-2013 are the averages of yearly growth rates.

**TABLE 7: Growth of Real GDP (annual average, percent), Country Details, 1999-2016**

	1999-2006	2007-2013	2013	2014	2015	2016 (Projection)
United States	3.4	1.1	1.6	2.6	2.8	1.6
Japan	1.6	0.6	1.5	0.2	1.0	0.9
<b>Euro Area</b>	<b>2.3</b>	<b>0.2</b>	<b>-0.3</b>	<b>0.9</b>	<b>1.7</b>	<b>1.5</b>
Austria	2.4	1.0	0.3	0.4	0.8	1.3
Belgium	2.3	0.9	0.0	1.3	1.4	1.2
Cyprus	4.1	-0.1	-5.9	-2.5	1.6	1.7
Estonia	6.9	0.3	1.6	2.9	1.1	1.9
Finland	3.4	0.1	-0.8	-0.7	0.5	0.8
France	2.2	0.6	0.7	0.2	1.3	0.9
Germany	1.4	1.0	0.3	1.6	1.7	1.5
Greece	4.0	-3.9	-3.2	0.7	-0.3	-0.2
Ireland	8.8	0.6	1.7	5.7	8.5	5.7
Italy	1.5	-1.1	-1.7	-0.3	0.8	0.9
Luxembourg	4.6	1.9	4.3	4.1	4.9	3.7
Malta	2.9	2.4	4.1	3.7	6.3	4.1
Netherlands	2.4	0.4	-0.5	1.0	2.0	1.8
Portugal	1.7	-0.8	-1.1	0.9	1.5	1.2
Slovak Republic	4.3	3.0	1.4	2.5	3.6	3.2
Slovenia	4.1	0.0	-1.1	3.0	2.9	1.7
Spain	3.9	-0.6	-1.7	1.4	3.2	2.6
<b>Other Europe</b>	<b>3.3</b>	<b>1.2</b>	<b>1.7</b>	<b>2.6</b>	<b>2.6</b>	<b>2.1</b>
Bulgaria	4.3	1.7	1.3	1.5	3.0	2.0
Czech Republic	4.0	0.8	-0.5	2.0	4.3	2.4
Denmark	2.1	-0.4	-0.2	1.3	1.2	1.0
Hungary	4.1	-0.4	1.9	3.7	3.0	1.7
Iceland	4.3	1.4	4.4	2.0	4.0	4.0
Latvia	7.6	-0.1	3.0	2.4	2.7	2.8
Lithuania	6.1	1.7	3.5	3.0	1.6	2.8
Norway	2.3	1.0	1.0	2.2	1.6	0.6
Poland	3.9	3.6	1.3	3.3	3.6	3.0
Romania	4.8	1.7	3.5	3.0	3.8	4.2
Sweden	3.4	1.0	1.2	2.3	3.8	3.4
Switzerland	2.1	1.7	1.8	1.9	0.9	1.2
United Kingdom	3.0	0.7	2.2	2.9	2.3	1.7
<b>Other Mature</b>	<b>5.2</b>	<b>3.6</b>	<b>3.0</b>	<b>3.5</b>	<b>2.9</b>	<b>3.0</b>
Australia	3.4	2.8	2.0	2.6	2.5	2.6
Canada	4.0	2.0	2.2	3.1	1.4	2.2
Hong Kong	4.8	3.2	3.1	2.6	2.4	1.1
Israel	3.5	3.8	3.3	2.7	2.5	2.4
New Zealand	3.7	1.7	1.7	3.0	3.4	3.0
Singapore	11.5	9.2	5.8	4.5	6.8	6.5
South Korea	7.6	4.6	4.0	4.2	4.6	4.4
Taiwan	5.6	4.1	2.5	4.1	1.1	1.4

*Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**Notes:** Growth rates are based on the annual percentage of difference of each variable; Regional GDP growth rates are aggregated shares in nominal PPP converted GDP; Growth rates for 1999-2006 and 2007-2013 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, 2015**

	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	90.9	135%	1	-20%	115%	59%	97,481	175%	1
Norway	90.2	134%	2	-26%	108%	14%	68,036	122%	3
Ireland	72.8	108%	3	3%	111%	-16%	53,191	95%	7
Belgium	68.7	102%	4	-12%	90%	-12%	43,390	78%	17
United States	67.2	100%	5	0%	100%	0%	55,825	100%	6
Netherlands	66.2	98%	6	-20%	79%	9%	48,927	88%	9
France	65.3	97%	7	-16%	81%	-10%	39,657	71%	20
Germany	64.6	96%	8	-22%	74%	10%	47,181	85%	12
Singapore	64.6	96%	9	26%	122%	39%	90,289	162%	2
Denmark	63.2	94%	10	-17%	77%	5%	46,095	83%	15
Switzerland	61.5	92%	11	-10%	81%	25%	59,026	106%	4
Sweden	60.6	90%	12	-8%	82%	4%	48,138	86%	10
Austria	57.6	86%	13	-7%	79%	4%	46,362	83%	14
Finland	54.7	81%	14	-6%	76%	-2%	40,896	73%	19
Australia	54.5	81%	15	1%	82%	7%	49,806	89%	8
Canada	52.2	78%	16	-3%	74%	10%	46,735	84%	13
Spain	51.4	76%	17	-3%	73%	-13%	33,357	60%	27
Italy	51.1	76%	18	-2%	74%	-12%	34,894	63%	25
United Kingdom	51.1	76%	19	-4%	72%	3%	41,543	74%	18
Hong Kong	50.0	74%	20	17%	92%	10%	56,690	102%	5
Taiwan	47.2	70%	21	13%	83%	2%	47,446	85%	11
Iceland	43.7	65%	22	4%	69%	13%	45,399	81%	16
Cyprus	43.0	64%	23	1%	65%	-19%	25,654	46%	37
Japan	42.9	64%	24	-1%	62%	6%	38,224	68%	22
New Zealand	41.2	61%	25	-1%	60%	7%	37,683	68%	23
Malta	40.5	60%	26	6%	66%	0%	37,119	66%	24
Slovak Republic	40.3	60%	27	-1%	59%	-7%	29,401	53%	31
Slovenia	40.3	60%	28	-3%	57%	1%	32,067	57%	28
Israel	37.7	56%	29	4%	60%	2%	34,690	62%	26
Czech Republic	35.9	53%	30	0%	54%	2%	31,074	56%	29
South Korea	34.5	51%	31	11%	63%	8%	39,350	70%	21
Greece	34.4	51%	32	8%	59%	-12%	26,365	47%	34
Portugal	33.7	50%	33	3%	53%	-5%	26,615	48%	33
Lithuania	33.0	49%	34	2%	52%	-1%	28,305	51%	32
Turkey	32.5	48%	35	2%	50%	-14%	19,909	36%	40
Estonia	32.4	48%	36	2%	50%	2%	29,504	53%	30
Hungary	31.8	47%	37	2%	50%	-3%	25,967	47%	35
Poland	30.6	46%	38	7%	53%	-6%	25,916	46%	36
Latvia	28.9	43%	39	3%	46%	-2%	24,564	44%	38
Chile	27.0	40%	40	5%	45%	-3%	23,762	43%	39
Romania	26.5	39%	41	1%	40%	-6%	18,995	34%	41
Bulgaria	24.0	36%	42	-3%	33%	1%	18,934	34%	42
Mexico	20.6	31%	43	6%	37%	-4%	18,129	32%	43
EU-12	30.9	46%		3%	49%	-4%	24,941	45%	
EU-15	57.0	85%		-9%	75%	-3%	40,466	72%	
EU-27	51.2	76%		-6%	70%	-3%	37,326	67%	
Euro Area	57.0	85%		-10%	75%	-4%	39,441	71%	

**Source:** The Conference Board Total Economy Database™ (Adjusted version), November 2016.

**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 2015 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, 1999-2015**

Annual average growth, 1999-2006, 2007-2012, 2013, 2014, 2015 and level as a % of US in 2015

	Annual Average Growth					GDP per person employed, % of US, 2015
	1999-2006	2007-2013	2013	2014	2015	
<b>World</b>	<b>2.7</b>	<b>2.4</b>	<b>2.0</b>	<b>2.1</b>	<b>1.5</b>	<b>30%</b>
United States	2.3	1.2	0.6	1.0	1.1	100%
<b>Europe</b>	<b>1.5</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.9</b>	<b>71%</b>
Austria	1.4	0.0	-0.1	-0.5	0.2	79%
Belgium	1.3	0.2	0.4	1.0	0.5	90%
Bulgaria	3.7	2.5	1.7	1.2	2.6	33%
Croatia	2.6	-0.6	1.5	-2.8	0.0	48%
Cyprus	1.5	0.1	0.0	-0.2	0.7	65%
Czech Republic	4.1	0.6	-0.8	1.4	3.0	54%
Denmark	1.6	0.0	-0.4	0.5	0.1	77%
Estonia	6.1	1.3	0.3	2.1	-1.8	50%
Finland	1.9	-0.3	0.0	0.2	0.9	76%
France	1.1	0.3	0.7	-0.1	0.9	81%
Germany	1.0	0.0	-0.3	0.7	0.9	74%
Greece	2.8	-1.4	0.4	0.5	-2.2	59%
Hungary	3.7	0.1	0.9	-1.1	0.1	50%
Iceland	2.5	1.0	0.9	0.3	0.2	69%
Ireland	4.8	1.8	-0.7	3.9	5.8	111%
Italy	0.1	-0.7	0.0	-0.4	0.2	74%
Latvia	6.9	2.0	0.7	3.8	1.4	46%
Lithuania	6.8	3.0	2.2	1.0	0.3	52%
Luxembourg	0.8	-0.8	2.5	1.5	2.3	115%
Malta	2.4	0.2	0.3	-1.3	2.7	66%
Netherlands	1.4	0.0	0.4	1.2	1.1	79%
Norway	1.5	-0.6	-0.1	1.1	1.0	108%
Poland	4.6	2.7	1.3	1.5	2.2	53%
Portugal	1.2	1.0	1.8	-0.5	0.1	53%
Romania	7.0	2.9	4.4	2.1	4.7	40%
Slovak Republic	4.2	2.6	2.2	1.1	1.6	59%
Slovenia	3.3	0.3	0.3	2.5	1.4	57%
Spain	0.0	1.5	1.3	0.4	0.3	73%
Sweden	2.4	0.2	0.3	0.9	2.3	82%
Switzerland	1.2	0.1	0.3	0.1	-0.7	81%
United Kingdom	1.9	0.2	1.0	0.5	0.6	72%
Japan	1.8	0.9	0.9	-0.4	0.6	62%
<b>Other Mature</b>	<b>3.3</b>	<b>2.1</b>	<b>1.5</b>	<b>2.0</b>	<b>1.5</b>	<b>75%</b>
Australia	0.9	0.9	1.1	1.4	0.8	82%
Canada	1.9	0.8	0.6	2.4	0.6	74%
Hong Kong	3.7	1.8	1.2	2.0	1.0	92%
Israel	1.2	0.5	0.6	-0.1	0.2	60%
New Zealand	1.1	0.9	0.5	-0.1	0.9	60%
Singapore	9.3	4.7	3.3	1.8	4.5	122%
South Korea	5.6	3.4	2.4	2.1	3.2	63%
Taiwan	4.5	2.9	1.5	3.0	0.1	83%
China (Alternative)	8.0	8.1	6.0	5.8	3.7	19%
China (Official)	9.2	10.1	7.8	7.2	7.0	
India	3.2	7.3	5.1	5.3	5.2	13%

**TABLE 9: Growth and level of labor productivity (GDP per person employed), Country Details, 1999-2015 (continued)**

*Annual average growth, 1999-2006, 2007-2012, 2013, 2014, 2015 and level as a % of US in 2015*

	Annual Average Growth					GDP per person employed, % of US, 2015
	1999-2006	2007-2013	2013	2014	2015	
<b>Other Developing Asia</b>	<b>3.5</b>	<b>2.9</b>	<b>3.4</b>	<b>4.1</b>	<b>4.2</b>	<b>16%</b>
Bangladesh	2.4	2.6	2.6	3.8	3.8	7%
Cambodia	4.8	5.0	6.1	5.2	5.0	5%
Indonesia	3.2	3.4	3.8	3.3	4.6	21%
Malaysia	6.4	2.7	1.6	4.3	3.1	51%
Myanmar	10.6	7.6	7.0	7.2	5.6	8%
Pakistan	1.9	0.5	2.5	3.1	2.5	14%
Philippines	4.4	3.7	5.1	6.8	5.4	16%
Sri Lanka	2.7	5.5	3.4	7.3	4.3	25%
Thailand	2.9	2.2	2.9	3.1	3.0	24%
Vietnam	4.4	3.6	3.8	4.9	6.7	9%
<b>Latin America</b>	<b>0.3</b>	<b>1.2</b>	<b>1.5</b>	<b>-0.1</b>	<b>-1.5</b>	<b>29%</b>
Argentina	-1.1	1.1	1.2	0.3	0.3	42%
Barbados	0.8	0.8	-0.8	1.2	0.5	31%
Bolivia	0.1	2.0	4.4	3.0	2.8	12%
Brazil	-0.3	2.0	1.6	-1.3	-4.1	25%
Chile	2.1	1.1	1.7	0.2	0.3	45%
Colombia	-0.1	1.8	3.2	2.3	0.7	23%
Costa Rica	1.5	0.7	1.8	0.1	0.0	26%
Dominican Republic	2.8	2.1	4.0	2.7	4.3	29%
Ecuador	-0.4	3.1	0.8	0.8	-1.4	25%
Guatemala	0.2	2.3	8.1	0.9	0.9	22%
Jamaica	-0.5	-0.3	0.0	-1.1	-0.5	18%
Mexico	1.3	-0.3	0.8	1.9	0.1	37%
Peru	1.4	4.1	3.4	1.4	1.8	22%
St. Lucia	0.0	-0.3	-0.9	-0.6	0.7	24%
Trinidad & Tobago	5.9	0.4	-2.7	-0.7	-1.0	60%
Uruguay	-0.1	3.6	4.9	2.9	1.7	38%
Venezuela	-0.7	0.0	-1.5	-6.9	-5.8	36%
<b>Middle East &amp; North Africa</b>	<b>0.7</b>	<b>0.1</b>	<b>-1.5</b>	<b>1.2</b>	<b>0.6</b>	<b>49%</b>
Algeria	-0.7	0.0	-3.1	9.4	2.0	46%
Bahrain	-1.6	-0.4	3.9	2.8	1.0	76%
Egypt	2.3	-1.1	-0.3	2.4	0.7	35%
Iran	0.8	0.2	-6.4	1.4	3.6	48%
Iraq	3.7	2.6	0.9	-5.2	-0.1	59%
Jordan	2.9	0.9	-2.4	-7.1	0.5	39%
Kuwait	3.0	-0.2	-1.9	-2.6	-1.3	119%
Morocco	0.4	1.1	3.6	1.7	2.6	18%
Oman	-1.1	-1.1	-2.1	-2.7	-0.7	86%
Qatar	-0.5	1.7	-0.2	0.9	0.2	166%
Saudi Arabia	-0.5	0.7	-0.6	1.8	1.0	138%
Sudan	4.6	0.0	2.3	4.0	-1.7	11%
Syria	0.8	-3.1	-9.9	-6.9	-10.0	14%
Tunisia	2.3	1.5	-0.1	0.3	-0.9	31%
United Arab Emirates	-0.3	-1.8	1.7	1.9	0.8	140%
Yemen	-0.4	-2.4	0.4	-5.6	-31.1	9%

**TABLE 9: Growth and level of labor productivity (GDP per person employed), Country Details, 1999-2015 (continued)**

Annual average growth, 1999-2006, 2007-2012, 2013, 2014, 2015 and level as a % of US in 2015

	Annual Average Growth					GDP per person employed, % of US, 2015
	1999-2006	2007-2013	2013	2014	2015	
<b>Sub-Saharan Africa</b>	<b>2.7</b>	<b>3.1</b>	<b>2.0</b>	<b>2.5</b>	<b>-0.4</b>	<b>9%</b>
Angola	6.7	5.1	3.6	1.4	0.6	27%
Burkina Faso	2.9	3.0	3.0	0.3	1.2	4%
Cameroon	-0.3	-0.4	2.4	3.2	2.7	6%
Côte d'Ivoire	-2.2	1.0	6.1	5.4	6.3	8%
DR Congo	-1.4	3.6	5.8	6.4	4.8	2%
Ethiopia	2.2	5.6	4.0	6.1	5.6	3%
Ghana	2.4	3.4	4.7	2.3	1.7	8%
Kenya	0.2	2.2	2.6	2.7	2.9	7%
Madagascar	0.3	-1.3	-0.9	0.7	0.4	3%
Malawi	1.2	1.6	2.0	2.0	-0.7	2%
Mali	1.2	2.3	0.1	5.8	2.6	6%
Mozambique	5.7	5.8	4.5	4.4	3.2	3%
Niger	0.1	2.2	2.1	4.0	0.5	2%
Nigeria	5.1	4.6	2.4	3.6	-2.4	15%
Senegal	1.6	0.4	0.9	0.9	1.8	6%
South Africa	2.1	1.4	-0.8	-0.4	-2.6	36%
Tanzania	2.6	3.6	7.7	4.3	4.2	5%
Uganda	5.6	1.5	-1.8	0.7	1.2	4%
Zambia	3.4	3.2	1.8	3.7	1.6	12%
Zimbabwe	-8.0	3.1	1.7	-1.6	-4.1	4%
<b>Russia, Central Asia and Southeast Europe</b>	<b>4.9</b>	<b>2.1</b>	<b>1.8</b>	<b>0.8</b>	<b>-2.1</b>	<b>36%</b>
Albania	6.8	3.9	5.8	1.1	-2.4	28%
Armenia	13.4	3.2	4.3	6.2	2.4	19%
Azerbaijan	13.3	6.6	4.0	1.3	-0.7	30%
Belarus	6.9	4.6	1.7	2.2	-2.4	31%
Bosnia & Herzegovina	4.9	1.5	1.9	-2.2	1.7	47%
Georgia	6.2	5.1	4.0	2.6	2.4	17%
Kazakhstan	6.8	3.3	5.2	5.1	1.0	42%
Kyrgyz Republic	1.2	3.9	11.7	2.2	2.6	7%
Macedonia	2.6	0.0	-2.5	1.8	1.3	31%
Moldova	8.3	4.8	7.0	3.5	-2.0	12%
Russian Federation	4.7	2.2	1.5	0.5	-4.8	43%
Serbia & Montenegro	6.0	3.5	-0.8	-10.3	0.4	32%
Tajikistan	6.1	4.9	6.7	5.9	3.8	8%
Turkey	3.6	0.2	1.3	1.2	1.4	50%
Turkmenistan	4.9	8.4	8.2	8.3	4.6	28%
Ukraine	7.9	1.5	-0.2	-4.1	-1.0	17%
Uzbekistan	3.0	3.9	4.1	6.5	6.5	12%

*Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**Notes:** Gross Domestic Product levels are expressed in 2015 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 2007-2013 are the averages of yearly growth rates.

**TABEL 10: Contributions of Sources of Growth to Aggregate GDP Growth, Major Regions, 1999-2015**

	World					Mature					Emerging				
	99-06	07-13	2013	2014	2015	99-06	07-13	2013	2014	2015	99-06	07-13	2013	2014	2015
GDP Growth	4.2	3.3	3.0	3.2	2.7	3.0	1.1	1.2	2.0	2.3	5.6	5.4	4.4	4.1	3.1
Labor	0.6	0.2	0.3	0.6	0.6	0.3	-0.1	0.1	0.8	0.8	0.9	0.6	0.5	0.4	0.4
Labor Quality	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Non-IT Capital	1.8	2.4	2.2	2.1	2.0	1.2	0.9	0.7	0.8	0.8	2.6	3.8	3.4	3.3	3.0
IT Capital	0.6	0.5	0.4	0.3	0.3	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
TFP Growth	0.9	0.1	0.0	0.0	0.0	-0.3	0.5	-0.3	-0.1	-0.1	0.1	1.6	0.4	0.1	0.0
	United States					Japan					Euro Area				
GDP Growth	3.3	1.1	1.6	2.6	2.7	1.6	0.6	1.5	0.2	1.0	2.3	0.2	-0.3	0.9	1.7
Labor	0.4	-0.1	0.7	1.1	1.2	-0.4	-0.4	0.0	0.2	0.2	0.5	-0.3	-0.8	0.4	0.7
Labor Quality	0.2	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1
Non-IT Capital	1.4	0.8	0.8	0.9	0.9	0.7	0.3	0.3	0.4	0.3	1.1	0.6	0.3	0.3	0.4
IT Capital	0.9	0.5	0.4	0.4	0.4	0.7	0.5	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.3
TFP Growth	0.5	-0.2	-0.5	0.1	0.1	0.1	0.1	0.7	-0.8	-0.1	0.1	-0.7	-0.2	-0.2	0.2
	China					India					Brazil				
GDP Growth	8.7	8.3	6.2	6.0	4.1	6.6	7.2	6.1	6.8	7.0	2.9	3.7	2.7	0.1	-3.9
Labor	0.5	0.2	0.2	0.2	0.2	1.4	0.1	0.5	0.7	0.8	1.1	0.6	0.2	0.5	0.1
Labor Quality	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Non-IT Capital	5.0	6.3	5.5	5.3	4.8	4.1	4.9	3.5	3.4	3.3	1.3	1.9	2.0	1.6	0.7
IT Capital	0.8	0.4	0.2	0.3	0.2	0.8	1.5	1.2	1.0	0.9	0.2	0.1	0.1	0.1	0.0
TFP Growth	2.3	1.3	0.2	0.1	-1.3	0.1	0.6	0.9	1.6	1.9	0.1	0.9	0.2	-2.2	-5.0

**Source:** *The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

**Notes:** All growth rates are calculated as log differences. Growth rates for 1999-2006 and 2007-2013 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 this productivity brief.

**TABLE 11: Total Factor Productivity Growth by Major Region, 1999-2015**

	1999-	2006	2007-	2013	2014	2015
United States	0.5	-0.2	-0.5	0.1	0.1	0.1
Europe	0.4	-0.6	-0.2	-0.1	0.3	0.3
<i>of which: Euro Area</i>	0.1	-0.7	-0.2	-0.2	0.2	0.2
Japan	0.1	0.1	0.7	-0.8	-0.1	-0.1
Other Mature	1.0	0.4	0.4	0.1	-0.1	-0.1
<b>Mature Economies</b>	<b>0.5</b>	<b>-0.3</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.1</b>
China	2.3	1.3	0.2	0.1	-1.3	
India	0.1	0.6	0.9	1.6	1.9	
Other Developing Asia	2.1	0.6	1.1	1.1	1.3	
Latin America	-0.1	-0.1	-0.2	-1.6	-2.5	
<i>of which: Brazil</i>	0.1	0.9	0.2	-2.2	-5.0	
<i>of which: Mexico</i>	-0.5	-1.4	-1.5	-0.1	-0.5	
Middle East & North Africa	0.2	-1.9	-2.5	-0.8	-0.9	
Sub-Saharan Africa	2.3	1.1	-0.2	0.2	1.2	
Russia, Central Asia and Southeast Europe	4.5	1.2	1.0	-0.1	-2.6	
<b>Emerging Markets and Developing Economies</b>	<b>1.6</b>	<b>0.4</b>	<b>0.1</b>	<b>0.0</b>	<b>-0.7</b>	
<b>World</b>	<b>0.9</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.3</b>	
<b>Addenda:</b>						
EU-15	0.1	-0.7	-0.2	-0.2	0.2	0.2
EU-13	2.3	-0.1	0.2	0.3	0.9	0.9
EU-28	0.4	-0.6	-0.2	-0.1	0.3	0.3
OECD	0.3	-0.4	-0.2	-0.2	0.0	0.0

**Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.**

**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 2007-2013 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, 1999-2015

	1999- 2006	2007- 2013	2013	2014	2015
<b>World</b>	<b>0.9</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.3</b>
United States	0.5	-0.2	-0.5	0.1	0.1
<b>Europe</b>	<b>0.4</b>	<b>-0.6</b>	<b>-0.2</b>	<b>-0.1</b>	<b>0.3</b>
Austria	0.5	-0.2	-0.4	-0.8	-0.3
Belgium	0.1	-0.7	-0.6	-0.2	-0.4
Bulgaria	-0.1	-0.9	-0.1	-0.3	1.1
Croatia	0.4	-2.6	-0.8	-2.9	-0.5
Cyprus	1.3	-1.6	-2.3	-0.7	1.0
Czech Republic	2.1	-1.1	-1.4	0.4	1.9
Denmark	-0.4	-1.2	-2.0	-0.1	-0.3
Estonia	1.9	-1.2	-1.1	0.3	-1.8
Finland	1.3	-1.0	-0.6	-0.9	0.0
France	0.5	-0.6	0.4	-0.8	0.1
Germany	0.5	-0.1	-0.2	0.1	0.2
Greece	0.6	-3.1	-0.7	2.1	-1.4
Hungary	1.4	-1.1	0.7	0.5	0.5
Iceland	1.2	0.9	2.6	-0.2	0.3
Ireland	1.5	-0.6	-0.9	2.7	3.4
Italy	-0.6	-1.0	-0.3	-0.4	0.1
Latvia	3.4	-1.6	0.5	1.3	1.5
Lithuania	2.0	-0.3	0.9	0.0	-2.3
Luxembourg	0.1	-1.6	2.1	0.5	1.9
Malta	1.9	0.5	1.7	1.2	2.6
Netherlands	0.1	-0.8	-0.6	0.2	0.5
Norway	-0.3	-2.0	-1.2	-0.2	-0.1
Poland	2.0	0.5	-0.7	-0.2	0.3
Portugal	-1.2	-1.0	-0.4	-0.6	-0.1
Romania	5.6	0.9	3.4	1.8	2.8
Slovak Republic	3.2	1.5	1.4	1.3	1.2
Slovenia	0.6	-1.2	-1.6	1.1	1.2
Spain	-1.1	-0.8	-0.8	-0.3	0.5
Sweden	0.9	-1.1	-0.3	0.0	1.3
Switzerland	0.1	-0.3	0.3	-0.2	-1.3
United Kingdom	0.7	-0.6	0.2	0.1	0.2
Japan	0.1	0.1	0.7	-0.8	-0.1
<b>Other Mature</b>	<b>1.0</b>	<b>0.4</b>	<b>0.4</b>	<b>0.1</b>	<b>-0.1</b>
Australia	-0.7	-1.0	-0.8	0.1	-0.2
Canada	0.1	-0.7	-0.3	0.7	-0.6
Hong Kong	1.5	0.2	-0.7	0.1	0.4
Israel	0.4	0.1	0.0	-0.2	-0.4
New Zealand	-0.6	-0.6	-1.6	-1.2	0.5
Singapore	4.1	0.3	-1.0	-0.6	1.7
South Korea	2.7	1.8	2.8	-1.0	0.0
Taiwan	1.8	1.7	0.0	1.3	-0.4
China (Alternative)	2.3	1.3	0.2	0.1	-1.3
China (Official)	2.8	2.2	0.8	0.6	1.2
India	0.1	0.6	0.9	1.6	1.9

**TABLE 12: Total Factor Productivity Growth, Country Details, 1999-2015 (continued)**

	1999- 2006	2007- 2013	2012	2013	2014
<b>Other Developing Asia</b>	<b>2.1</b>	<b>0.6</b>	<b>1.1</b>	<b>1.1</b>	<b>1.3</b>
Bangladesh	-0.6	-0.3	-0.1	0.6	0.7
Cambodia	1.2	0.0	1.2	0.8	1.0
Indonesia	2.0	1.0	1.1	0.8	1.2
Malaysia	3.7	0.2	-1.4	0.7	0.3
Myanmar	5.1	-2.0	-1.8	-1.7	-1.9
Pakistan	2.0	0.5	2.8	3.1	2.4
Philippines	2.2	1.5	2.2	2.2	2.4
Sri Lanka	1.3	3.4	3.1	4.9	2.2
Thailand	2.8	0.7	1.7	-0.1	1.0
Vietnam	0.0	-0.4	1.0	1.5	2.4
<b>Latin America</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.2</b>	<b>-1.6</b>	<b>-2.5</b>
Argentina	-0.3	-0.2	-0.1	-1.9	0.2
Barbados	-1.0	-0.1	-0.1	0.7	0.0
Bolivia	0.2	0.5	1.5	-0.1	-0.4
Brazil	0.1	0.9	0.2	-2.2	-5.0
Chile	-0.4	-1.8	-0.8	-1.3	-1.4
Colombia	0.3	-0.1	1.0	0.2	-1.3
Costa Rica	0.5	-0.6	0.8	-1.5	-1.7
Dominican Republic	0.3	0.0	1.8	2.6	2.5
Ecuador	-0.8	2.2	1.3	-0.5	-2.3
Guatemala	-0.8	1.2	3.7	1.2	1.5
Jamaica	-0.2	-0.2	0.8	0.0	0.9
Mexico	-0.5	-1.4	-1.5	-0.1	-0.5
Peru	1.5	0.4	-0.3	-2.6	-1.6
St. Lucia	-1.5	-2.0	-0.6	0.2	0.0
Trinidad & Tobago	5.3	1.5	1.1	-0.5	-1.3
Uruguay	-0.3	1.7	1.7	0.2	-0.4
Venezuela	0.3	-0.8	-1.2	-6.5	-7.0
<b>Middle East &amp; North Africa</b>	<b>0.2</b>	<b>-1.9</b>	<b>-2.5</b>	<b>-0.8</b>	<b>-0.9</b>
Algeria	0.5	-1.0	-2.6	4.3	0.5
Bahrain	-0.2	-1.6	2.9	2.0	0.5
Egypt	0.2	-1.9	-1.5	1.0	-0.8
Iran	0.2	-1.8	-3.4	1.4	3.5
Iraq	6.4	3.3	-1.0	-6.5	-1.7
Jordan	2.9	0.1	-2.3	-4.4	-0.9
Kuwait	3.4	-2.2	-3.4	-4.0	-4.2
Morocco	-0.6	-0.7	1.5	-0.2	1.1
Oman	-2.2	-3.4	-4.2	-5.0	-3.5
Qatar	0.8	-1.5	-3.5	-2.4	-2.5
Saudi Arabia	-1.9	-3.4	-4.0	-2.0	-1.9
Sudan	-2.2	-3.2	1.3	2.4	-3.0
Syria	-0.1	-5.2	-14.4	-11.8	-12.2
Tunisia	1.3	0.3	0.0	0.2	-1.0
United Arab Emirates	1.3	-2.7	-0.1	0.4	-0.4
Yemen	-0.6	-3.3	0.1	-5.1	-33.7

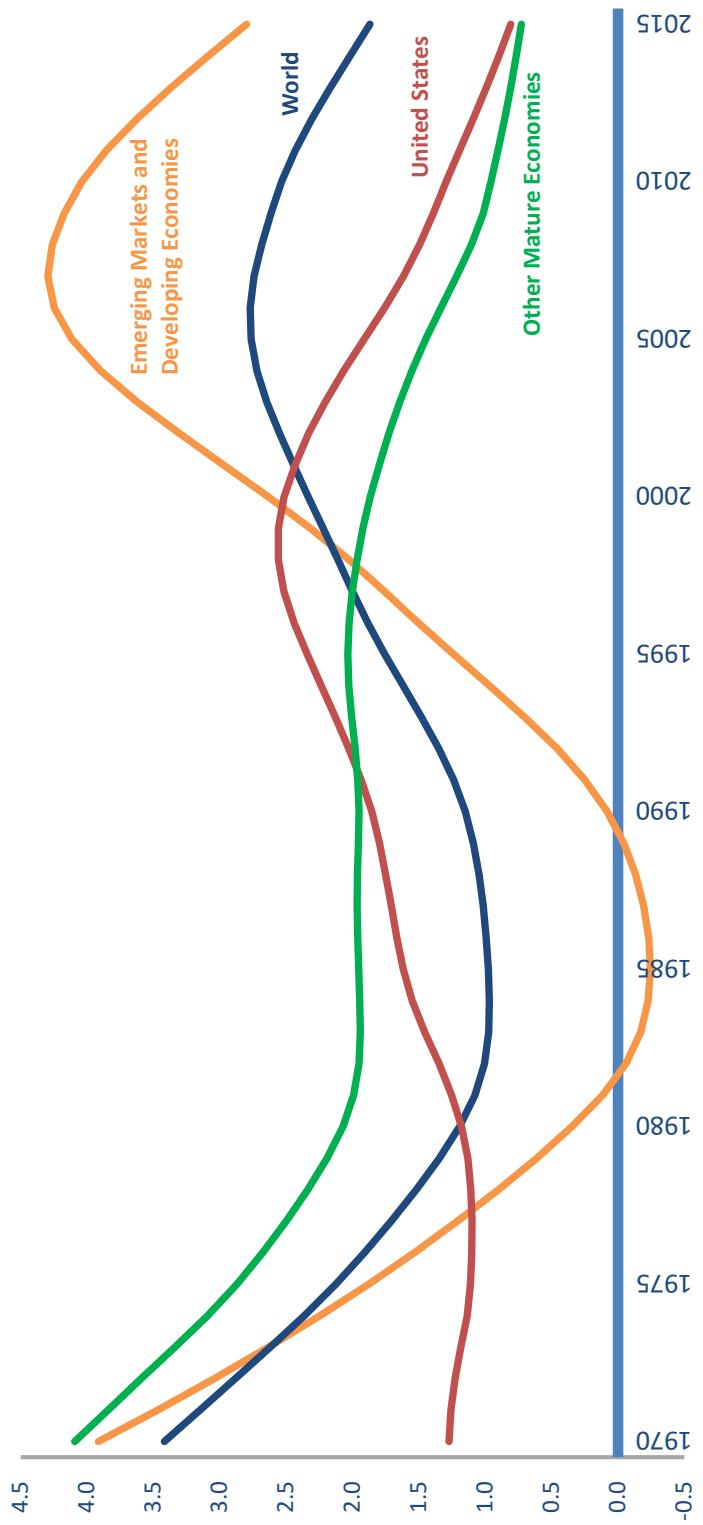
**TABLE 12: Total Factor Productivity Growth, Country Details, 1999-2015 (continued)**

	1999- 2006	2007- 2013	2012	2013	2014
<b>Sub-Saharan Africa</b>	<b>2.3</b>	<b>1.1</b>	<b>-0.2</b>	<b>0.2</b>	<b>1.2</b>
Angola	6.6	2.3	1.8	-0.3	2.1
Burkina Faso	2.1	-0.4	-1.7	-3.0	0.4
Cameroon	-0.1	-0.7	1.4	1.6	1.1
Côte d'Ivoire	0.9	3.6	7.2	6.6	7.1
DR Congo	0.3	3.3	5.5	6.2	4.7
Ethiopia	1.4	1.1	-3.2	-1.8	-2.9
Ghana	1.6	0.7	0.7	0.3	0.3
Kenya	0.3	0.6	1.3	0.5	0.8
Madagascar	0.0	-2.9	-1.4	-0.1	-0.9
Malawi	0.2	1.4	2.4	2.6	-0.1
Mali	1.6	1.0	0.0	4.4	2.3
Mozambique	2.6	-1.4	-8.6	-2.7	1.4
Niger	0.7	0.0	0.5	1.4	-2.1
Nigeria	5.1	2.9	-0.1	0.8	4.1
Senegal	0.0	-1.4	-1.6	-1.1	-0.2
South Africa	1.0	-0.6	-1.6	-1.4	-2.6
Tanzania	1.9	-0.5	2.0	0.9	1.0
Uganda	2.9	-0.5	-2.8	-0.7	-0.2
Zambia	3.1	2.9	-0.1	1.1	-0.5
Zimbabwe	-8.0	4.4	3.4	0.9	-1.5
<b>Russia, Central Asia and Southeast Europe</b>	<b>4.5</b>	<b>1.2</b>	<b>1.0</b>	<b>-0.1</b>	<b>-2.6</b>
Albania	3.6	1.3	1.8	-0.1	-1.5
Armenia	10.6	0.9	2.8	4.0	1.8
Azerbaijan	6.4	0.1	-0.2	-2.2	-4.7
Belarus	4.7	-0.2	-2.3	-0.2	-5.0
Bosnia & Herzegovina	2.6	-0.2	1.1	-2.0	1.2
Georgia	4.4	3.0	2.0	1.2	-0.4
Kazakhstan	7.4	2.5	3.2	2.4	-1.4
Kyrgyz Republic	1.6	2.2	7.9	0.2	-0.1
Macedonia	1.3	-1.2	-1.3	0.8	0.6
Moldova	6.7	3.6	6.9	3.1	-1.6
Russian Federation	5.6	2.1	1.3	0.5	-4.0
Serbia & Montenegro	2.6	0.2	-0.6	-7.4	-0.6
Tajikistan	7.4	5.3	7.2	6.2	4.3
Turkey	0.6	-1.1	0.0	-0.8	0.0
Turkmenistan	4.7	4.0	2.7	3.1	0.1
Ukraine	7.0	1.1	0.3	-5.9	-3.9
Uzbekistan	3.0	2.6	2.3	4.4	4.3

**Source:** The Conference Board Total Economy Database™ (Adjusted version), November 2016.

**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 2007-2013 are the averages of yearly growth rates; Regional aggregates are weighted using shares in nominal PPP converted GDP.

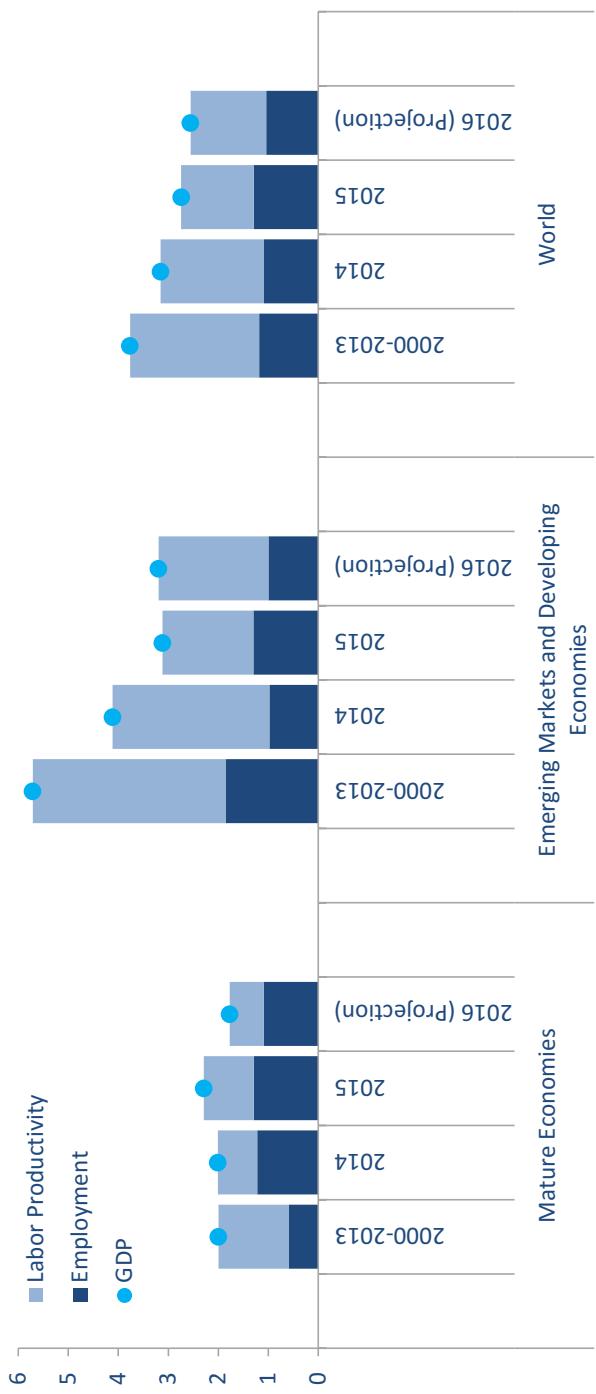
CHART 1: Trend growth of Labor productivity (output per person) using HP filter, Major Regions, 1971-2015



**Source:** The Conference Board Total Economy Database™ (Adjusted version), November 2016.

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

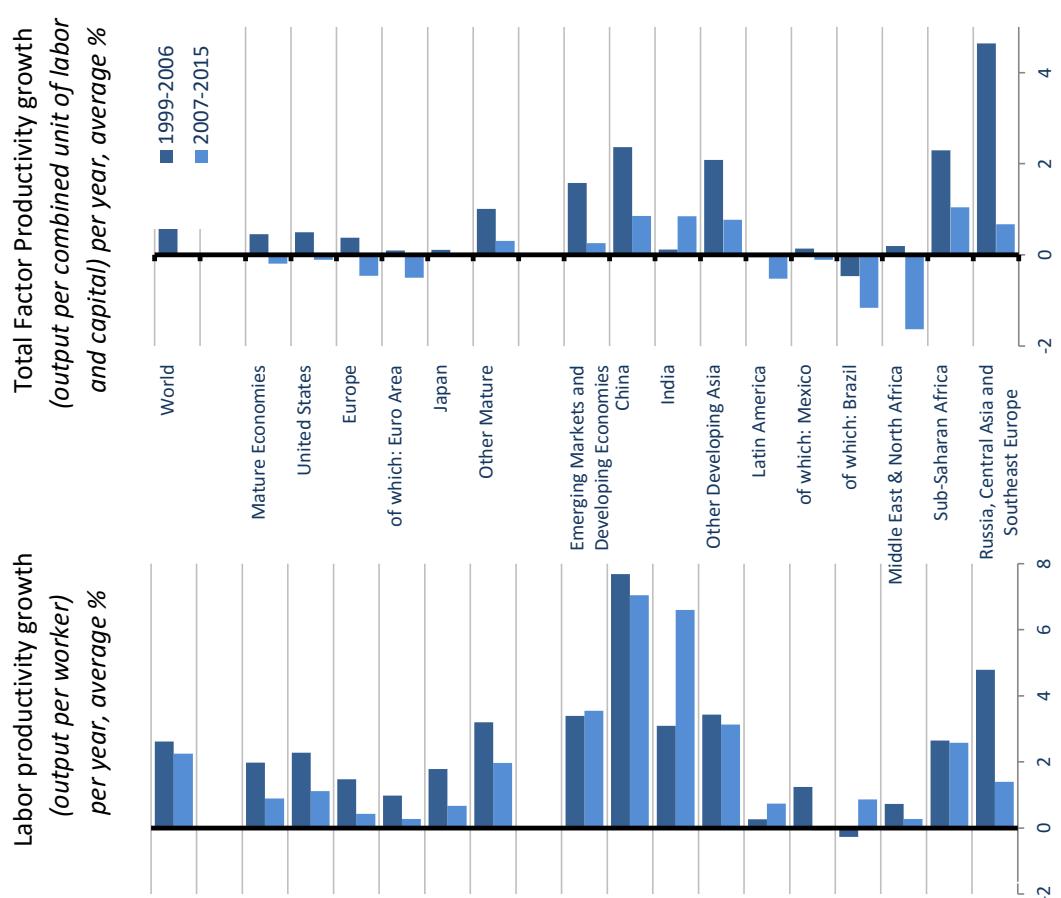
**CHART 2: Contribution of Labor Productivity and Employment to GDP growth, Major Regions, 2000-2016**



**Source:** *The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

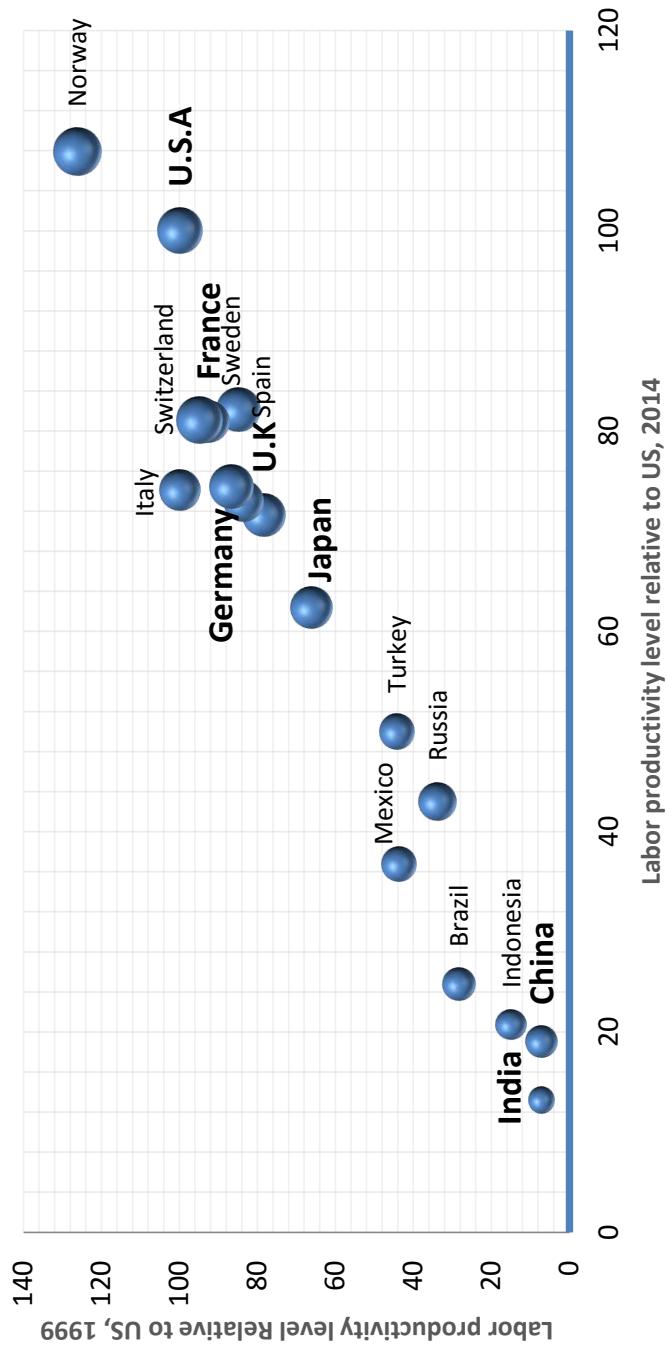
**Notes:** GDP growth (measured in log differences) is the sum of growth in employment and output per worker.

**CHART 3: Growth of Labor Productivity and TFP, Major Regions, 1999-2015**



*Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

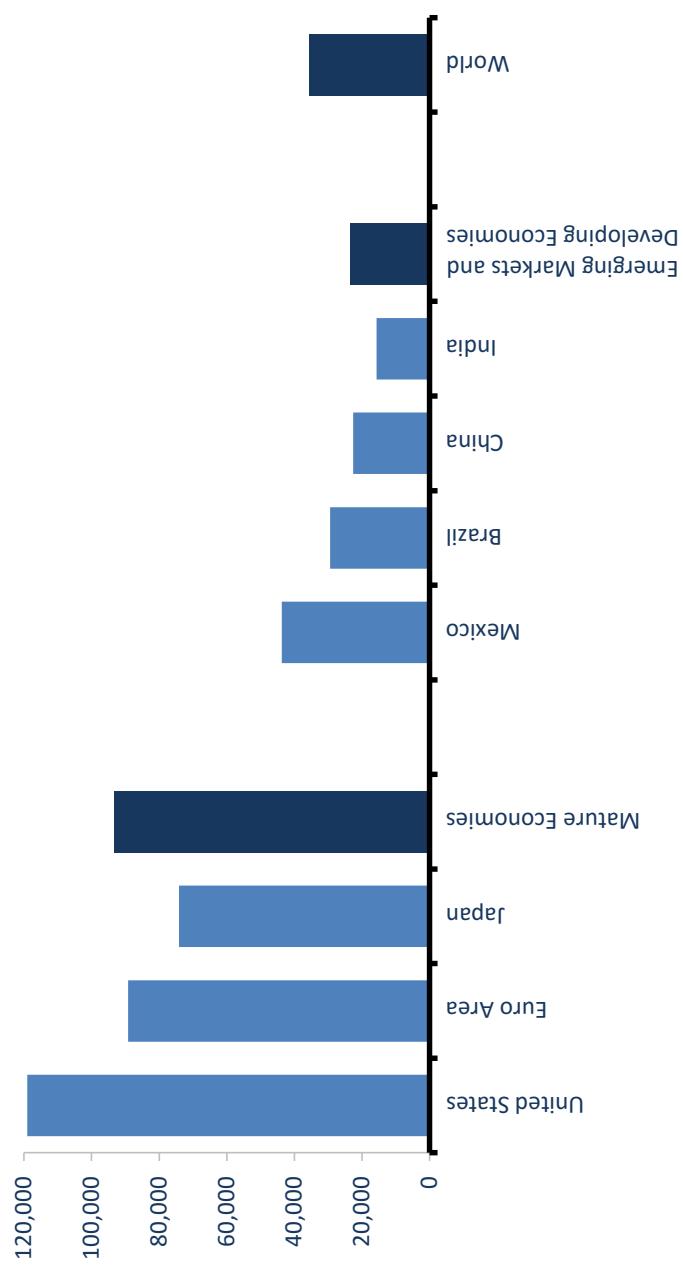
**CHART 4: Comparison of Overall Productivity Levels, Selected Countries, 1999 and 2015**



**Source:** *The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

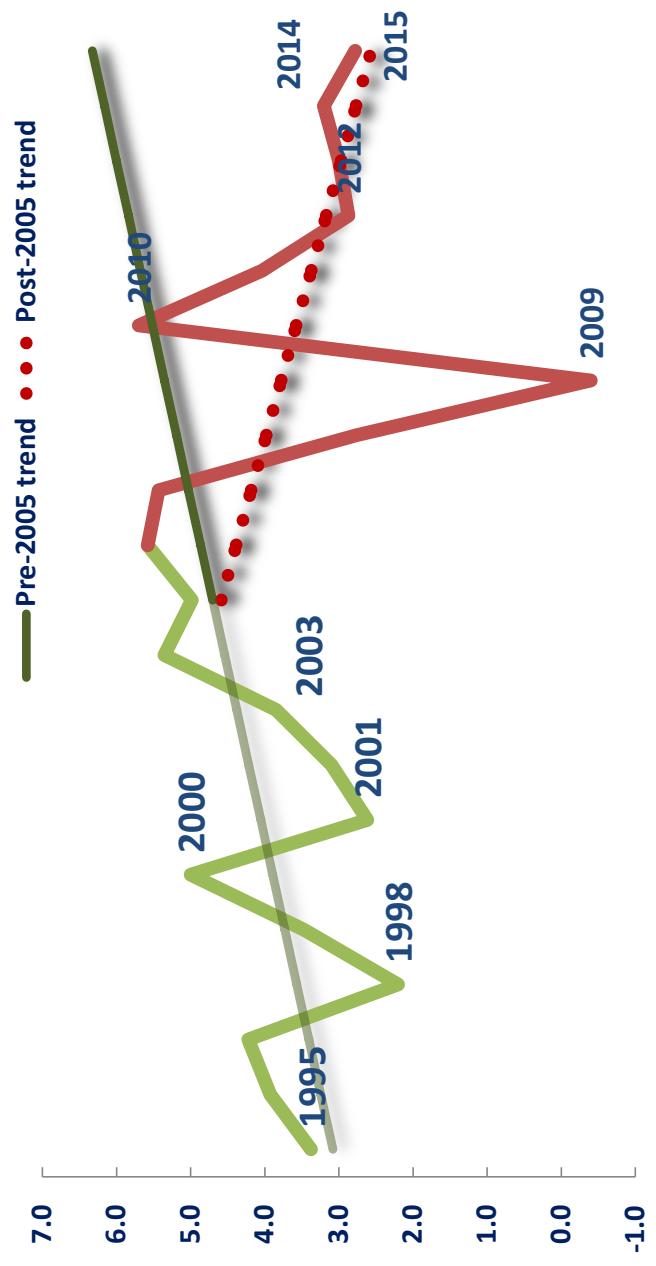
**Notes:** Labor productivity is measured here as output per worker; The size of the bubble represents per capita income in 2014.

**CHART 5: Output (value added) per person employed in US\$, corrected for differences in price levels, Major Regions, 2015**



*Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.*

CHART 6: Growth of Labor Productivity, World, Actual, Pre-2005 and Post-2005 Trend, 1995-2015



Source: The Conference Board Total Economy Database™ (Adjusted version), November 2016.

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