

# G7

MUNK  
SCHOOL  
OF  
GLOBAL  
AFFAIRS

G7 Research Group  
UNIVERSITY OF  
TORONTO

May 2017

[g7g20.com](http://g7g20.com) | [@g7\\_g20](https://twitter.com/g7_g20)



# Italy

## The **Taormina Summit**

### **Italy as G7 host**

*The theme of the summit is building the foundations of renewed trust*

### **Citizen safety**

*Working towards ending terrorism and managing migrant and refugee flows*

### **Economic stability**

*2030 Agenda and the Sustainable Development Goals*

### **Inclusive growth**

*An orderly and fair transition towards the Next Production Revolution*



# Give Hope

**When millions of Syrian refugees felt forgotten, the world responded. That glimmer of hope is keeping them going.**

Your donation to the World Food Programme could make a huge difference by providing Syrian refugees with vital food vouchers.

No refugee should go hungry.

**YOU CAN HELP TOO**  
[wfp.org/Syria](http://wfp.org/Syria)

**THANK YOU.**

*WFP is the world's largest humanitarian agency providing food assistance to some 80 million people in 80 countries.*



**World Food Programme**

[wfp.org](http://wfp.org)

**ONE FUTURE #ZEROHUNGER**



Join us  
on Facebook



follow us  
@WFP

# G7

## Italy: The Taormina Summit | May 2017

### Leaders' perspectives


- 08 UNITED TO FIGHT DESPAIR  
Paolo Gentiloni,  
Prime Minister of Italy
- 10 AT THE CROSSROADS  
Beji Caid Essebsi,  
President of Tunisia
- 14 LEADERS' VIEWS  
Angela Merkel, Theresa May, Jean-Claude  
Juncker and Emmanuel Macron
- 16 LEADERS' VIEWS  
Donald Trump, Justin Trudeau  
and Shinzo Abe
- 18 A SUMMIT OF  
SECURITY SUCCESS  
John Kirton, Editor of *G7 Italy: The  
Taormina Summit*


### Investing in innovative Italy


- 22 FOR THE MANY, NOT THE FEW  
Pier Carlo Padoan, Minister of Economy  
and Finance, Italy
- 26 ENSURING GLOBAL INNOVATION  
DELIVERS BENEFITS  
Carlo Calenda, Minister of Economic  
Development, Italy
- 28 FORGING THE FOURTH  
INDUSTRIAL REVOLUTION  
Giuliano Poletti, Minister of Labour  
and Social Policies, Italy
- 30 TRANSFORMING THE  
WELL-BEING OF THE WORLD  
Beatrice Lorenzin, Minister of  
Health, Italy
- 32 HERITAGE IS PRECIOUS  
Dario Franceschini, Minister of Cultural  
Heritage and Tourism, Italy



# CONTENTS

 @g7\_g20

 [www.g7g20.com](http://www.g7g20.com)

 [linkedin.com/company/g7g20](https://www.linkedin.com/company/g7g20)



34 INFRASTRUCTURE'S ROLE IN SOCIAL INTEGRATION  
Graziano Delrio, Minister of Infrastructures and Transport, Italy

36 FIGHTING INSECURITY  
Vincenzo Boccia, President, Confindustria

## Citizen safety

40 A FAIR CHANCE IN LIFE  
Fred van Leeuwen, General Secretary, Education International

44 A REFLECTION OF PROGRESS  
William Lacy Swing, Director General, International Organization for Migration

46 STAUNCHING THE TIDE  
Juan Manuel Vega-Serrano, President, Financial Action Task Force

48 TAKING BOLD STEPS  
HE Dr Bandar MH Hajjar, President, Islamic Development Bank Group

50 STARK CHALLENGES  
David Ramin Jalilvand, Friedrich Ebert Foundation, and Kirsten Westphal, Stiftung Wissenschaft und Politik

54 FACING UP TO CHALLENGES IN EAST ASIA  
David A Welch, CIGI Chair of Global Security, Balsillie School of International Affairs



58

PROFESSOR DAME  
SALLY DAVIES  
Chief Medical Officer,  
United Kingdom



64

JAMES HOSPEDALES  
Executive Director,  
Caribbean Public Health Agency



### Economic, environmental and social stability

74

CAN THE PARIS  
AGREEMENT SURVIVE?  
Ella Kokotsis, Director of Accountability  
for the G7 and G20 Research Groups

76

COMBATING MIGRANTS'  
HUNGER  
David Beasley, Executive Director,  
United Nations World Food Programme

78

AIMING TO PROTECT  
FREE TRADE  
Gary Clyde Hufbauer, Peterson  
Institute for International Economics

81

FOCUS ON ENERGY SECURITY  
Paul Simons, Deputy Executive Director,  
International Energy Agency

84

ALL ON BOARD  
Angel Gurría, Secretary General,  
Organisation for Economic Co-operation  
and Development

88

TACKLING THE ROOT  
CAUSES OF MIGRATION  
Gilbert F. Houngbo, President,  
International Fund for Agricultural  
Development

90

LEAVE NO WOMAN  
OR GIRL BEHIND  
Phumzile Mlambo-Ngcuka,  
Undersecretary General and  
Executive Director, UN Women

94

MOVE TO THE LONG TERM  
Julia Kulik, Director of Research,  
G7 Research Group



78

97

TRANSFORMING EDUCATION  
Irina Bokova, Director General,  
UNESCO

102

PLACING TEACHING  
AT THE CORE  
Caroline Bracht, Senior Researcher,  
G7 Research Group



120



### EDITORIAL & DESIGN

**Editors** John Kirton & Madeline Koch  
**Managing Editor** Zoë Henry  
**Sub-Editors** Sarah Evans &  
Matthew Hutchings  
**Art Director** Ross Ellis  
**Senior Designer** Alix Lawrence

### SALES & MANAGEMENT

**Sales Manager** Laurie Pilate  
**Sales Executives** Edward Syed, Mo Rami,  
Fausta Fanatismi & James Johnston  
**Chief Executive Officer** Richard Linn

Printed by Stephens & George

Published by  
**newsdeskmedia**

www.newsdeskmedia.com  
6 Snow Hill,  
London, EC1A 2AY, UK  
+44 (0) 20 7650 1600  
@newsdeskmedia

66

ERIK SOLHEIM  
Executive Director, United Nations  
Environment Programme



86

ROBERT FAUVER,  
Former US G7/G8 Sherpa



76

94



108

### Innovation, skills and labour

108 ANTICIPATING CHALLENGES  
Joachim Breuer,  
President, ISSA

112 ECONOMIC INCLUSION  
FOR ALL  
Sir Suma Chakrabarti, President,  
European Bank for Reconstruction  
and Development

114 TOMORROW'S WORK  
Guy Ryder, Director General,  
International Labour Organization

116 RESILIENCE IS KEY TO  
FINANCIAL SECURITY  
Chiara Oldani, Professor of  
Monetary Economics, University  
of Viterbo

### Strengthening the G7 system

120 PRESERVING CONSENSUS  
Jan Wouters, Professor of International  
Law and International Organisations at  
the University of Leuven, and Sven Van  
Kerckhoven, Co-chair of the Business and  
Economics Department at Vesalius College

122 FROM COMMITMENTS  
TO COMPLIANCE  
Brittany Warren, Researcher,  
G7 Research Group

124 ADVOCACY AND ENGAGEMENT  
Peter I Hajnal, Fellow of Senior College  
and Research Associate at the Munk  
School of Global Affairs

In cooperation with  
**The G7 Research Group**  
Munk School of Global Affairs  
and Trinity College,  
University of Toronto,  
1 Devonshire Place, Room 209N  
Toronto ON M5S 3K7, Canada  
+1 416 946 8953    www.g7.utoronto.ca



© 2017. The entire contents of this publication are protected by copyright. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means: electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher. The views and opinions expressed by independent authors and contributors in this publication are provided in the writers' personal capacities and are their sole responsibility. Their publication does not imply that they represent the views or opinions of the G7 Research Group or Newsdesk Media and must neither be regarded as constituting advice on any matter whatsoever, nor be interpreted as such. The reproduction of advertisements in this publication does not in any way imply endorsement by the G7 Research Group or Newsdesk Media of products or services referred to therein.



LEADER PERSPECTIVE

# United to fight despair

*The world needs to act in cohesion if the forces of terrorism and enforced migration are to be defeated, as Italian Prime Minister **Paolo Gentiloni** commented on at the Center for Strategic and International Studies*

We all know that the Mediterranean plays a central role in human history in general. The sea between the lands has favoured the rise and flourishing of some among the most advanced and significant civilisations since ancient times ... It has preserved its long-standing character of a political, economic, social, and cultural crossroads between ... east and west, and between north and south ...

### The migration situation

But in the last few years, the greater Mediterranean area has increasingly come to be associated with waves of chaos, fragmentation, volatility and loss of life ... Massive migration flows from Africa to Europe, widespread instability, open conflict, increasing terrorist threats against Western targets and interest, new conflicts with a religious basis or excuse – these issues have been confronting our governments and societies for years now, and if not adequately addressed, may imperil the very core of the Western political model founded on democracy, pluralism and the market economy.

Italy is committed to tackle the root causes of these challenges, but we have to do it all together ... These challenges correspond to a set of priorities: ... One,



*We should continue to address the broader political and security challenges coming from areas of crisis around the Mediterranean*



effectively managing migration flows coming into Europe. Two, stabilising areas of crisis in the Middle East and Africa. Three, succeeding in the fight against terrorist, and in particularly eradicating Daesh ...

The priorities of the current Italian G7 presidency [focus] among other things, on the management of human mobility, stability in sub-Saharan Africa and the Middle East and North Africa region, inclusive growth, education and prevention of terrorism ... [The] gradual integration of the economies of the region ... should be pursued as a means to boost growth and job creation in the entire Euro-Mediterranean region ... Other major actors are involved, starting from the Gulf countries, sub-Saharan Africa, and extra-regional players.

#### **Rescue missions**

... Managing the dramatic increase in migration flows from Africa to Europe ... is of the essence for Italy. Around 500,000 migrants were saved ... [by] the Italian Navy and Coast Guard, and by European rescue teams over the last three years ... There is space for more vigorous international engagement ...

More balanced burden sharing among European Union countries and more efficient control systems on arrival are fundamental, combined with a more effective identification return mechanism ... Long-term policies should be promoted to foster stabilisation and economic development in countries of origin and transit ... [This is] at the origin of the inclusive approach we are promoting with regional partners ...

Second, we should continue to address the broader political and security challenges coming from areas of crisis around the Mediterranean. Libya remains at the top of our priorities ... An inclusive political process could be safeguarded for the unity of the country, to the benefit of all Libyans, as well as of the entire region.

The major crisis in the Mediterranean is Syria. Now it is going through its seventh year of horrific violence ... Italy will continue to work closely with the like-minded partners and allies to foster a political solution.

Paolo Gentiloni  
Prime Minister, Italy

Third, [this] year could be the year of the defeat of Daesh in the control of territory. Our strategy should continue to insist on the military campaign, as well as in counter-narrative, increased exchanges among relevant intelligence agencies, deradicalisation ... Cooperation with regional actors remains key, as well as with local Muslim communities inside our boundaries ... The horrific acts of violence we have witnessed over the years have been carried out very often by Islamist elements who were born, raised and became radicalised in Europe. They did not arrive from outside our borders ...

#### **Necessary steps**

I am profoundly convinced that there are a number of possible and necessary steps: ... implementing measures of mutual trust, following a multilateral and comprehensive approach to conflict resolution, recognition of borders, fostering interreligious dialogue, enhancing economic cooperation in a perspective of joint exploitation of natural resources, from water to natural gas ... Through our joint efforts we can make a difference in reaffirming the role and the perception of the Mediterranean as a region of renewed opportunities and visions as a solid cornerstone of global stability. ... We have ... invited a few of the major African leaders, from Nigeria to Morocco, from Tunisia to Kenya, ... to underline the message that Africa is absolutely relevant ...

Please keep Africa on top of our agenda. This will be the message that we will give to [G7 leaders] in Sicily ...

#### **Much to discuss**

It is fundamental [for the G7] to reach a sense of unity among these so relevant countries ... specifically important this time because many of the leaders have changed ... 'We have much to discuss, trade, relations with Russia, and relations with China. These countries should be united in confronting with these issues, and this is an opportunity. You are there for 24, 36 hours, having several meetings in closed doors, only the leaders. It is a useful opportunity. **G7**

**W**e Tunisians are pleased that the 2017 G7 summit will be held in Taormina on the island of Sicily, a reminder of the special place the Mediterranean has played in our history and the importance it constitutes for us today.

This sea has consistently served as a crossroads between Africa and Europe. Current challenges show well the type of international efforts that are needed to achieve shared prosperity on both shores and beyond.

During the last six years, Tunisians have produced the most outstanding example of democratic transformation south of the Mediterranean. We are proud of what we have achieved, so far. The national dialogue conducted by Tunisia's main political parties and civil society groups paved the way for free and fair elections in 2014. Since then, we have formed a national unity government and embarked on wide-ranging reforms to accelerate economic recovery and meet the demands of our young and ambitious population.

Our success in satisfying these demands will protect our young people from the lure of such options of despair as extremism and illegal migration. Seven years after the 2010 revolution, we are yet to satisfy the aspirations of our youth who are clamouring for jobs and a chance at a better life.

Our democratic experiment will not succeed without the success of our economic transition. We are already working to establish a business-friendly environment through vast reforms ensuring the removal of red tape, the alleviation of tax burdens, and the facilitation of investment and customs procedures. We held an international investment conference last November that highlighted Tunisia's many assets. We are counting on the support of the international community to boost investments and financial resources and expand trade opportunities for Tunisia.

### **A safe environment**

A crucial factor in our economic recovery is to ensure a safe environment for our own citizens as well as foreign investors and visitors. The security measures we have taken to combat terrorism and protect our borders have prevented major incidents from occurring since the 2015 attacks – credit goes to the improved efficiency of our security forces and support from our foreign friends and partners, especially the G7 members.

The fight against terrorism will be long and costly. It requires budget spending at the expense of human and social development resources, at a time when such resources are needed most. It is also a multifaceted struggle requiring far-reaching educational reforms that

instil young minds with the culture of technological innovation and openness and counter the narratives of extremism and radicalisation.

We know that innovation is necessary for the economic growth that will create greater employment and business opportunities. Tunisia boasts a large pool of university graduates and, each year, about 70,000 new graduates enter the job market. Over one-third of them are science and technology majors.

### **More than halting migration**

Africa looms large in our future, and given the potential Africa offers, this conviction should be shared by Europe and the rest of the world. European concerns over unprecedented migration inflows and security threats are legitimate. But Europe's policies towards Africa should be about more than just halting illegal migration. A long-term policy must also focus on the wider issues of sustainable development, youth employment and poverty eradication.

Tunisia, whose ancient name 'Ifriqiya' gave Africa its name, remains one of the continent's key actors. We understand Africa's predicaments and want to work with our African partners to pursue an economic model that ensures both the continued growth and the sustainable development of the continent.

### **Helping the displaced**

There are, of course, urgent tasks requiring immediate action. Among them is the situation in Libya, where lawlessness has provided terrorist organisations and illegal migration traffickers with a fertile ground to pursue their business. Since the 2011 uprising in Libya, Tunisia has been hosting about one million displaced Libyans. The economic cost to us from lost trade and employment opportunities in Libya is estimated at billions of dollars. Inspired by our own compromise-based experience of national dialogue, we have consistently encouraged various Libyan parties to iron out their disagreement through peaceful negotiations.

With the help of the G7, Tunisia is confident it can meet the challenges it faces today. Tunisia's success will resonate with the whole community of nations. **G7**

*"Europe's policies towards Africa should be about more than just halting illegal migration"*

Beji Caid Essebsi  
President, Tunisia

LEADER'S PERSPECTIVE

## At the crossroads

*With its strategic position in North Africa and the Mediterranean, Tunisia is uniquely placed to build on its free and fair elections by establishing wide-ranging economic reforms, writes **Beji Caid Essebsi**, President of Tunisia*

RAINER JENSEN/DPA/ALAMY LIVE NEWS



DUFF &amp; PHELPS



# Valuation without rigor = Transparency without clarity

In the aftermath of the 2008–2009 financial crisis, the public demanded politicians and regulators answer two questions: 1) How did the crisis happen? and 2) How can we prevent it from happening again? Globally, the response was to impose new regulation designed to improve the regulators’ ability to monitor investment managers, protect investors and insulate taxpayers from systemic risk.

In analysing causes of the crisis, commentators and market participants indicted “mark-to-market” or “fair value” accounting as an enabler of misguided lending decisions that became systemic issues. But measuring investments at fair value provides users of financial information, from investors to regulators to policy makers, with a transparent basis of information to make decisions. Although authorities currently seem focused on the broader financial system and on accounting principles and disclosures rather than the underlying valuation, the



**NOAH  
GOTTDIENER**  
CEO and  
Chairman of  
the Board  
**Duff and Phelps**

lesson of the financial crisis should be that fair value accounting is more relevant than ever.

Investors need a consistent basis of reporting value to scrutinise risk, make asset allocation decisions, monitor investments, oversee investment managers, and report financial positions and ongoing performance to their constituencies. Policy makers and regulators need the same level of transparency to monitor systemic risk and evaluate market conditions as they assess the degree of regulation required. Fair value is the common basis of reporting that allows stakeholders to evaluate financial positions on an objective basis.

With the US Congress considering revisions to Dodd-Frank; Brexit in the UK; and the EU's review of AIFMD, fair value accounting may find itself in the crosshairs. While some easing of the rules may occur as supervisory and government authorities examine the effects – intended and otherwise – of the current regulatory environment, this must not come at the

expense of good governance. Indeed, strengthening the mechanics of fair value accounting will help ensure that reported amounts are accurate, reliable and provide the necessary basis for decision making.

Regarding the concerns surrounding fair value: What is fact and what is fiction? Where does suspicion of fair value accounting begin and trust in fair value judgements end? Unfortunately, there is still a great deal of misinformation and misunderstanding surrounding the concept of fair value. Fair value is, “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” So why do these simple words still create so much debate?

As we saw during the financial crisis, valuing assets – especially illiquid assets – requires significant informed judgement. Bankers often question the need for fair value; negative interest rates highlight dislocation in the value of expected cash flows; and variables like climate change are just beginning to enter the valuation discussion. While global fair value accounting standards have converged around the definition of fair value, it is undeniable that questions remain about how best to estimate and use fair value consistently, particularly with respect to alternative assets.

Consequently, the valuation profession is in the process of implementing expanded frameworks to ensure that value is estimated and reported with sufficient rigor and is of the highest quality. The new Certification in Entity and Intangible Valuation (CEIV) in the US, combined with International Valuation Standards (IVS) now being applied on a global basis, should help mitigate some of the above issues. By implementing and strengthening valuation frameworks globally, the valuation profession reinforces its operating principle that fair value is the best basis to measure and disclose investment assets even though judgment in valuing such assets will always be a necessary variable.

For the sake of the global economy, it is vital that the strides made in strengthening fair value accounting in the last decade are not undermined in a global environment that is challenging the reach of regulation. Further, new information, such as measuring environmental, social and governance effects, also needs to be objectively considered using a common basis of underlying analysis. A rigorous valuation framework must consider the potential impact of climate change, energy policy and other macro issues that will arise in the future.

As the G7 contemplates the future, efforts need to be taken to ensure that the established fair value framework is retained and enhanced so that investable assets are measured on a consistent basis that provides transparency to all parties involved. A dynamic, robust global valuation framework ensures that accurate information is available to make vital decisions that will allow the world to prosper and to avoid past mistakes.

**DUFF & PHELPS**

duffandphelps.com

LEADERS' VIEWS

# European G7 leaders

*These leaders' views were adapted from various speeches, bilaterals and interviews that reflect their opinions regarding the work of the G7*

**Jean-Claude Juncker**  
European Commission



**Summit**

North Korea's violation of United Nations Security Council Resolutions [and] its pursuit of weapons of mass destruction [are] a major concern ... We

will continue to fully implement the latest UN resolutions and consider any further restrictive measures needed to keep up the pressure. That is further proof of how committed [we] are to working within a rules-based global system ... Openness will continue to drive our economies and societies forward ... When it comes to trade ... we believe in free, fair and rules-based trade. And so we will continue to look out towards the world, rather than return to isolationism. The European Union is open for business – for fair business.

**Angela Merkel**  
Germany

Thanks to the western partners' cohesion and strength, we were able to experience the end of the Cold War and the achievement of the goals of values-based cooperation, particularly those of transatlantic cooperation, in 1990 ... Today, over a quarter of a century later, we no longer have two blocs. The structure has become far more multilateral, but we still have a superpower – the United States of America – and we still have a transatlantic link. We have a united Europe with 28 members. We have seen the rise of emerging economies, particularly in Asia.

We are facing asymmetrical threats, particularly that of Islamist terrorism, starting on 11 September 2001. There are new conflicts as a result of civil wars, population growth and climate change. There is growing interdependence as a result of globalisation and the spread of digital technology. This means that we do not have a

fixed international order. Despite the end of the Cold War, relations with Russia remain on shaky ground – I say that from a European perspective.

I firmly believe that the challenges of today's world cannot be overcome by any one country alone. These challenges require joint efforts. This is why I believe we need multilateral international structures, which we must strengthen and make more efficient.



**Summit**



## Emmanuel Macron

France



Summit

I'm aware of the anger, anxiety and doubts ... that a large proportion [of French voters] have expressed. It's my responsibility to listen to them while protecting the most fragile, by better organising solidarity, by combating all forms of inequality and discrimination, by implacably and resolutely ensuring your security, and by guaranteeing the nation's unity. For behind each of the words I've just uttered, I know there are faces: women and men, children and families, entire lives; there are you and yours.

I'll defend France, its vital interests, its image and its message: I make that commitment to you. I'll defend Europe, the common destiny the peoples of our continent have given themselves ... Our civilisation is at stake, our way of living, of being free, of promoting our values, our common enterprises and our hopes. I'll work to rebuild the link between Europe and the people it is made up of, between Europe and citizens ... I say to their leaders that France will be active and mindful of peace, of the balance of power, of international cooperation, of respect for the commitments made on development and the fight against global warming ... France will be at the forefront of the fight against terrorism, both on its soil and in international action. However long this battle lasts, we will fight it without growing weak ... Some of these challenges are opportunities, such as the digital revolution, the ecological transition, Europe's recovery. Others are threats, such as terrorism. With all my strength I shall fight against the division which undermines and weakens us.

## Theresa May

United Kingdom

I am determined that a global Britain will be a great champion of free trade ... A global Britain will also be a leading partner in addressing the wider challenges ... at the heart of Italy's G7 presidency this year, including making the global economy work for everyone, finding better solutions to managing the huge population movements we are seeing, and keeping up the pressure on Russia in response to its actions in Ukraine ... I hope that this year's G7 can help us go further in working with all our international partners to shape a global economy that truly works for everyone ...

That same co-operation is vital for our security too. And just as we do in Afghanistan and at the forefront of the international coalition against Daesh, [we] will continue to work together for the security of all our citizens ...

We will also continue to work together in tackling the migration crisis in the Mediterranean ... We need to work together to find better solutions to the huge population movements we are seeing, so refugees don't have to risk their lives on dangerous journeys and so we control the unmanageable economic migration that is neither working for migrants nor for our own populations ...



Summit

We must also do everything possible to protect men, women and children from trafficking, sexual violence and labour exploitation. And I am grateful that Italy has put modern slavery on the G7 agenda for the first time and hope that we can enhance the joint working between our law enforcement agencies to cultivate a new radical, global and coordinated approach to defeat this vile crime that runs counter to our deepest values.

Finally, on the situation in eastern Ukraine, I emphasised the UK's continuing concern over Russia's aggressive and destabilising actions and the drastic deterioration in the humanitarian situation that we have seen recently. And it is vital that the international community continues to exert pressure and that we continue to maintain sanctions on Russia until the Minsk agreements are fully implemented.



LEADERS' VIEWS

# Asia and North America

*These leaders' views were adapted from various speeches, bilaterals and interviews that reflect their opinions regarding the work of the G7*

**Donald Trump**  
United States



Italy is one of America's largest trading partners ... We both seek a trading relationship that is balanced, reciprocal ...

Italy is also a key partner in the fight against terrorism. Italy is now the second-largest contributor of troops to the conflicts in Iraq and Afghanistan. I would also like to thank you, Prime Minister, for your leadership on seeking stabilisation in Libya, and for your crucial efforts to deny ISIS a foothold in the Mediterranean ...

Finally, I want to say how much I look forward to visiting Sicily for the G7, as we seek to foster cooperation not only on matters of security, but also science, commerce, health and technology. Our two countries have shared interests and shared values, and we can each make great contributions to the other.

**Justin Trudeau**  
Canada



The world's markets are becoming increasingly integrated, and global demand for clean technology and renewable energy is growing quickly. We need to work together to drive energy innovation that will meet the world's future energy needs and create good, middle class jobs today. This is about making our economy more competitive and leaving our kids a cleaner environment ...

Over the past year, we have consulted Canadians and our international partners in order to craft a new approach to international assistance. Our refocused efforts will help the world's poorest and most vulnerable people, including by promoting human rights, women's empowerment and gender equality, and respect for diversity and inclusion.

**Shinzo Abe**  
Japan



Japan will work together with countries with which we share values such as freedom, democracy, human rights and rule of law ...

Persistence is the driving force. Five years have passed since I took office, and even among the leaders of the G7 countries my tenure is relatively long. Building on the more than 500 summit meetings conducted so far, Japan will engage in dynamic peaceful diplomacy and economic diplomacy, and fulfil its responsibilities at the centre of the world stage, while taking a panoramic perspective of the world map ...

Global issues such as terrorism, the displacement of refugees, poverty and infectious diseases are growing increasingly serious. Now is the time for us to hold up high the banner of "Proactive Contribution to Peace."



# Enhance your health system through Nazounki technology

**N**azounki builds technology based solutions, taking environmental, social and economic aspects into consideration, encouraging sustainable development.

Africa is a complex place. While it has some of the poorest countries, it is also a place where technology is growing fast, giving opportunity to new development. And technology could become the next step in solving the public health crisis.

We believe that every ministry of health is aware of these advances and opportunities. The question is how do we implement them? E-health can come across as complicated.

Nazounki has been working in e-Health for more than 15 years. As a team of medical professionals, we have created solutions to solve the issues we were facing in our own daily practice.

From patient focus to regional and national level, our solutions are measurable, relevant and integrated. The people who use our technology are patients and medical professionals who are involved in medicine and delivery of healthcare.

Nazounki's experts can help you build your own solution at any level of the healthcare system. On a national level we are improving preventative and curative capabilities of the healthcare system; improving access to healthcare systems for the general population; helping professionals deliver medicine securely; and providing decision makers with a "sentinel" that monitors health systems in real-time, detecting risks and giving alerts.

Get the right treatment

Investments made in healthcare in African countries are usually under the recommendation of the World Health Organization (WHO), and there are still many issues surrounding accessibility. Patients travel great distances to receive the appropriate healthcare, and governments are spending huge amounts of money to treating their patients abroad, which when an obligation is a cause for concern for everyone involved, from the patient and their family, to the medical professionals and the insurers.



Since 2001, Nazounki has developed a unique concept of taking care of patients all over the world. We provide the best road to recovery – a one-stop solution for patients, practitioners, governments and insurers. Finding the right specialist and most secure hospital is easy in Europe, Asia, the United States of America, and selected African countries.

We believe that the interest of the patient comes first. We want to shorten the duration of the stay abroad without lowering the quality of the medical care. Nazounki has a network of over 1,500 internationally recognised specialists and professors. We provide the best road to recovery on an international level, and it makes healthcare to residents of rural areas much more accessible, saving lives, saving money, and creating jobs.



*Nazounki is making healthcare to residents of rural areas much more accessible, saving lives, saving money, and creating jobs.*



**Dr Sayave Gnomou**  
Chief Executive Officer  
and President  
www.nazounki.org  
info@nazounki.org  
docgnoumou@  
nazounki.org  
+33 (0)147 89 33 15

**NAZOUNKI**  
Global Medical Network

## KEY TAKEAWAYS

German Chancellor Angela Merkel will be at her 12th G7/G8 summit

The summit will be spurred on by recent terror attacks in Europe

# A summit of security success

Three pillars underpin Italy's G7 presidency, supporting the mission of putting citizens first. **John Kirton** explores the prospects for the Taormina Summit

*John Kirton is Director of the G7 Research Group and Co-director of the G20 Research Group, the BRICS Research Group and the Global Health Diplomacy Program, all based at Trinity College and the Munk School of Global Affairs, University of Toronto, where he is a Professor of Political Science. He is also a Non-Resident Senior Fellow at the Chongyang Institute for Financial Studies at Renmin University of China and co-author, with Ella Kokotsis, of The Global Governance of Climate Change: G7, G20 and UN Leadership.*

 @jjkirton  
 [www.g7.utoronto.ca](http://www.g7.utoronto.ca)

On 26–27 May 2017, the leaders of the world's major democratic powers will gather for their 43rd annual summit in Taormina, Sicily. The event will be hosted by new Italian Prime Minister Paolo Gentiloni, who assumed his position only six months previously, following his predecessor's referendum defeat.

It will be the first serious outing on the world stage for new US President Donald Trump, who has never previously held a position in government or the military, and who will meet his peers and partners face-to-face to do the big deals on the economy, development and security that the world badly needs. It will also be the first G7 summit for British Prime Minister Theresa May, preoccupied with splitting from the European Union while keeping her own country together, and just a few days before a general election. France will have the freshest leader, Emmanuel Macron, chosen by its voters just a few weeks previously.

With so many newcomers, much will depend on the experienced veterans, above all German Chancellor Angela Merkel at her 12th successive G8 and now

G7 summit, two of which she hosted. She will be backed by Japanese Prime Minister Shinzo Abe, at his sixth, Canadian Prime Minister Justin Trudeau at his second, and the EU leaders Jean-Claude Juncker and Donald Tusk at their third.

### Three pillars

Together the leaders will address Italy's formal agenda of, first, citizen safety; second, economic, environmental and social sustainability, and the reduction of inequalities; and, third, innovation, skills and labour in the age of the next production revolution. The first pillar begins with the

management of "human mobility", framed not as an economic benefit but a security threat, and covers stability in the proximate sub-Saharan African and Middle East and North Africa regions, and the prevention of terrorism. The second pillar consists of inclusive growth, energy and climate change, food security and nutrition, health, women's and girls'

economic empowerment and education, with the traditional topic of trade, which does not have a place of its own. The third pillar, overlapping the G20's agenda, covers



*With so many newcomers, much will depend on the experienced summit veterans*



North Korea's escalating nuclear threat is likely to inform the summit

Common political principles will propel cooperation

production innovation, knowledge-based capital and enabling infrastructures, and the future of work and welfare systems.

In their summit deliberations, leaders will build on the firm foundation set by the meetings of their ministers of culture at Florence on 30–31 March, energy in Rome on 9–10 April, foreign affairs in Lucca on 10–11 April, and finance in Bari on 11–13 May. After the summit will come ministerial meetings on the environment in Bologna on 10–11 July, industry and information and communications technologies in Turin on 26–27 September, science in Turin on 28–29 September, labour and employment in Turin on 30 September–1 October, agriculture in Bergamo on 14–15 October, and health in Milan on 5–6 November.

The Taormina leaders will also be bolstered by the confidence that comes from their strong compliance by the end of January 2017 with selected priority commitments made at their summit in Japan last year. Their overall interim compliance score of 76 per cent is led by the commitment on the Paris Agreement on climate change at 100 per cent, cybersecurity at 94 per cent, terrorist finance at 88 per cent, Syrian refugees at 81 per cent and development and food and agriculture both at 75 per cent, followed by trade, health, and crime and corruption all at 69 per cent, Ukraine at 63 per cent, and the non-proliferation of weapons of mass destruction at 50 per cent.

### Security high on the agenda

The summit will be spurred to success by the recent shocks of deadly terrorist attacks in Nice, Berlin, London, St Petersburg,

# John Kirton

Director  
G7 Research Group



Sweden and Paris, the deadly chemical weapons attacks by Syrian President Bashar al-Assad on his own innocent citizens, North Korea's escalating nuclear threats to Japan and the United States, growing famine in drought-stricken Africa, and, possibly, a springtime surge in migrants flooding into Europe from across the Mediterranean and territorial provocations by Russia in Europe or by others elsewhere.

It is on such subjects that the failure of the United Nations Security Council, no dedicated counterterrorist organisation and several underfunded Rome-based bodies for food security and famine relief.

Common political principles will propel cooperation, as no G7 members have yet retreated from their devotion to open democracy and human rights, the way that several other G20 members recently have. Domestic political cohesion will constrain the G7 leaders, as only Japan's Abe and Canada's Trudeau have the high political capital, public support, and personal continuity, competence and conviction that breeds success in this compact, cherished G7 summit club.

### Working together

Taormina will thus be primarily a security summit, with development and especially the economy taking a secondary place. It will also be a substantial success, with President Trump having learned that he must adjust to his real democratic peers to pioneer the badly needed solutions to key global challenges that America alone cannot produce. **G7**

# G7 G20.com

The leading source of analysis, opinion  
and comment on the global agenda

World leaders have agreed to keep global  
temperature rise this century below

# 2°C

Are G20 members sticking  
to this commitment?

Find out at  
**G7G20.com**



@G7\_G20



LinkedIn.com/company/G7G20

Published by




In partnership with

MUNK  
SCHOOL  
OF  
GLOBAL  
AFFAIRS

G7 Research Group  
G20 Research Group



---



**It is fundamental  
for the G7 to  
reach a sense of  
unity among  
these relevant  
countries**



Paolo Gentiloni

*Prime Minister, Italy*

---

JESSICA RINALDI/THE BOSTON GLOBE VIA GETTY IMAGES

# FOR THE MANY, NOT THE FEW



*Mother and daughter at a rally  
against income inequality in  
Boston in 2015*

*Global instability and financial insecurity have helped to foster political discontent and a shift to populism. The G7 needs to focus on reducing inequality of prospects, in order to enhance social cohesion, writes **Pier Carlo Padoan***



## Pier Carlo Padoan



Minister of Economy  
and Finance  
**Italy**

*Pier Carlo Padoan was appointed Italy's Minister of Economy and Finance in February 2014. A former Professor of Economics at the Sapienza University of Rome, he has served as Deputy Secretary General, Chief Economist and G20 Finance Deputy of the Organisation for Economic Co-operation and Development. Previously he was Italy's Executive Director at the International Monetary Fund. He also served as Economic Adviser to the Italian Prime Ministers Massimo D'Alema and Giuliano Amato, and has been responsible for coordinating Italy's position on many issues, including G8 summits.*

 @PCPadoan  
 [www.mef.gov.it](http://www.mef.gov.it)

## KEY TAKEAWAYS

Pessimism about global economic prospects is spreading

Low growth and rising inequality may spur further political discontent

The G7 and G20 meetings are taking place in a complex geopolitical and economic environment. Since the financial crisis, the global economy has seen repeated downward revisions of growth projections, which have become the new normal, bearing the risk of diffused pessimism.

Even if some short-term macro-financial risks have normalised, they could still appear in new stress episodes. Other kinds of risks, including geopolitical tensions, are intensifying, spreading pessimism about global economic prospects. These factors, in a context of low growth, increasing global imbalances and rising inequality, may spur further political discontent and shift consensus towards populism and nationalistic policy strategies.

### Four pillars of priorities

The finance track of Italy's G7 presidency has identified four main pillars as priorities: the global economy and inequality, coordination of international financial institutions (IFIs), security as a global public good and international taxation.

Global recovery is progressing, yet growth remains too moderate and below potential, with the balance of risks still tilted downward. Against this backdrop, G7 members must confirm their commitment to international economic and financial cooperation and their determination to use all policy tools – monetary, fiscal and structural – to achieve the goal of strong, sustainable, balanced and inclusive growth.

The prolonged period of modest growth and high or rising inequality within countries requires determined policy actions to equip

economies and people to adjust to the pace of change, so the global economy works for all.

Excessive inequality undermines confidence and limits future growth potential. Locking in privilege and exclusion can contribute to regional divides and undermine intergenerational mobility, while putting stress on social cohesion and institutions.

Inclusive-growth fiscal policy combined with comprehensive, balanced packages of structural policies will help foster broad-based growth while facilitating adjustment to the dislocations created by technological advances and global trade.

### The role of multilateral banks

The G7 has been active in forging consensus on improving the use of IFIs' resources to create additional lending capacity.

Under the Italian presidency, the G7 is now discussing ways that multilateral development banks (MDBs) can scale up their impact, make better use of their balance sheets and of scarce public resources, mobilise greater amounts of additional private finance, and enhance complementarity among themselves and with the International Monetary Fund.

### Countering security threats

In a world of increasingly complex interdependencies among countries, security reaches far beyond domestic borders. The main solution lies in cooperation and in global initiatives. The G7 continues to play a leading role here. This pillar includes countering terrorist financing and improving cybersecurity in the financial sector.

On terrorist financing, the G7 is working to reinforce the existing tools to enhance information sharing, domestically and internationally, among relevant authorities and to step up the engagement to foster cooperation with the private sector.



Given various risks, institutional frameworks and national priorities, the G7 will continue to share best practices and identify areas where improvements are needed in international standards and in domestic regulations and policies, while ensuring that common international standards are well implemented. The G7 recognises the need to promote financial inclusion and to mitigate terrorism financing risks within the money and value transfer services sector.

Developing common practices to help the timely detection of vulnerabilities in the financial system is key to enhancing the cyber-resilience of financial institutions and the financial sector as a whole.

Given the unconventional and rapidly evolving nature of cyber risks, effective cybersecurity assessments require that traditional approaches be enhanced and complemented by more successful practices, including regular cyber exercises and simulations and intelligence-led penetration tests.

Cyberattacks represent a growing



Cyberattacks represent a growing threat for all economies

Tax authorities should intensify their sharing of specialised knowledge



Demonstration in the Valencia streets

**4.75%**  
tax on corporate profits in Italy in 2015 according to the OECD – down from 6.9% in 2000

threat for all economies and the design of effective policies for cybersecurity is hampered by the very limited availability of reliable data on the frequency and impacts of cyberattacks. More reliable, accurate information is necessary. There are thus merits in discussing, at the G7 level, the potential for a cyber insurance market.

#### Improving tax transparency

Timely, consistent and widespread implementation of the base erosion and profit shifting package is crucial. All relevant and interested countries and jurisdictions should commit to implement it and join the inclusive framework.

Reaffirming the goal to enhance tax transparency at the global level, all jurisdictions should ratify the Organisation for Economic Co-operation and Development's Convention on Mutual Administrative Assistance in Tax Matters and implement the Common Reporting Standard on the automatic exchange of information. Progress from jurisdictions that have not yet achieved a satisfactory



*The G7 sees the need to promote financial inclusion and to mitigate terrorism financing risks*



level of implementation of international standards on tax transparency is expected.

Technology and an increasingly borderless world have accelerated globalisation in trade and finance, and also facilitated illicit financial flows and globalised financial crimes. Enhanced cooperation among tax and law enforcement authorities is critical to counteract tax evasion and other financial crimes.

Tax authorities should intensify their sharing of specialised and targeted knowledge and practices within the framework of existing international cooperation networks and rely more on joint risk analyses and audits. The G7 is promoting – through a common declaration – a whole-of-government approach to fighting tax and financial crime, building on more effective inter-agency and international cooperation.

A key goal of the next G7 meeting is to recognise inequality as an urgent challenge for which action cannot be deferred, regardless of national political perspectives, and to renew the promotion of ongoing work on more traditional G7 issues. **G7**



*Digital technologies are opening up new opportunities but they also have the potential to disrupt*



# Ensuring global innovation delivers benefits

*The successful integration of technology to enhance citizens' lives requires a multipronged approach, writes **Carlo Calenda***

that improve sustainable growth, productivity gains and living standards are widely diffused, both within and between countries, among pioneering and traditional sectors of the economy, among enterprises of different sizes, and among all layers of society. Digital technologies are opening up new opportunities for individuals, the economy and society, but they simultaneously have the potential to disrupt the current livelihoods of large numbers of citizens and to widen digital divides, especially for small and medium-sized enterprises (SMEs).

## **Inclusiveness**

Industrial policy should encourage the full participation of SMEs by playing an active role in the NPR, by developing and implementing effective measures for enabling innovative business models, for bridging the digital divide, and for fostering SMEs' engagement, inclusiveness and interconnectivity in order to unleash their innovative capability as a major driving force in the NPR.

At the same time, policy frameworks should be put in place to enable the rise of ecosystems where innovation can flourish and the NPR can expand its reach through effective collaboration within supply chains and open innovation models among established large companies, SMEs and innovative start-ups. Another key issue is represented by the enhancement of the cooperation between the public and private sectors to support the financing of the NPR – enabling tangible and intangible infrastructure.

## **Openness**

I believe also that SMEs should have access to data to participate fully in global value chains, in other words to enhance their competitiveness thanks to advanced digital services and technologies. To spread the benefits of the NPR, key actions include

**A**s Minister of Economic Development, I have the honour to lead two strategic G7 ministerial meetings: energy, on one hand, and information and communication technologies (ICT) and industry, on the other.

The ICT and industry ministers' meeting will be held after the Taormina Summit in May, in September back to back with two other important ministerial meetings: science, technology and industry, and labour and employment. In fact, Italy's G7 presidency is concentrating its efforts on a "people-centred action plan on innovation, skills and labour".

The ministers involved are asked to take a multipronged approach to focus on enabling factors, on education, and on industrial and social policies.

Therefore, my commitment is to make every effort to steer the transformation that is now under way so that the Next Production Revolution (NPR) will be inclusive, open and secure. I will ask G7 ICT and industry ministers to be far-sighted, collaborative and coordinated among themselves and extend their policies' lifespan to future generations, by ensuring that the benefits of the new technologies

## **KEY TAKEAWAYS**

**Industrial policy should play an active role in the Next Production Revolution**

**SMEs should be able to use advanced digital services to enhance their competitiveness**

**Guidelines for research and development should be created to mitigate cyber risks**



fostering open and market-oriented interoperability standards and architecture for seamlessly integrating machines, devices and systems (plug-and-play mechanisms), as well as promoting a level international playing field for business based on free but fair competition with the protection and enforcement of intellectual property rights. The right incentives are needed for global value chains to work and businesses to grow.

### Security

Citizens and businesses often feel threatened by cyber risks and by unpredictable developments in the field of artificial intelligence. Effective policies are needed to enforce cybersecurity and train our communities to deal with cyber risks. Guidelines for research and development in artificial intelligence should be established to mitigate threats and to preserve human dignity. Overall, international cooperation is necessary to ensure that the NPR can and will be managed safely.

## Carlo Calenda

Minister of Economic  
Development  
**Italy**

*Carlo Calenda became member of the Italian Cabinet of Ministers in 2013. He served as Minister of Economic Development in the Renzi Government from May to December 2016. In December 2016 he was confirmed in the same role by the new Prime Minister, Paolo Gentiloni.*

[@CarloCalenda](https://twitter.com/CarloCalenda)  
[www.sviluppoeconomico.gov.it](http://www.sviluppoeconomico.gov.it)

### G7 energy ministers' meeting

The G7 energy ministerial meeting was held in Rome on 9–10 April. It focused on the key issue of the Rome Initiative to strengthen energy security in the context of sustainability and growth in a complex international environment. It is important to continue defining a broader energy security strategy to ensure that the different aspects of the globalised energy markets shared among energy consumers, producers and transit countries are taken into account.

Moreover, even though energy access in Africa is a topic generally not included in the G7 energy portfolio, the ministers have technical competencies on energy technologies and policies aimed at implementing energy access. For this reason, I promoted the organisation of a side event dedicated to Africa, in order to analyse the current status of the power market and further the dialogue on how to accelerate sustainable energy access in the continent. **G7**

## KEY TAKEAWAYS

Future of work and social protection are at the core of Italy's policies

Citizens are concerned about the pace and scale of technological progress

Access to technology is critical if the fourth Industrial Revolution is to include all communities



# Forging the fourth Industrial Revolution

*To help workers of the future cope with technological and social change, governments need to focus on placing people at the centre of innovation, writes **Giuliano Poletti***

How can labour market and social policies help workers grasp the opportunities of the fourth Industrial Revolution while they cope with emerging challenges? How can we ensure that technology and new production models will bring advantages for all and not lead to new forms of inequality and poverty? The meeting of G7 labour ministers in Turin from 30 September to 1 October 2017 will be dedicated to the challenges of the next Industrial Revolution on the theme of 'Putting people at the centre of innovation'.

### **Restoring trust in the future of work**

The future of work and social protection are currently at the core of Italy's policies. They also represent a key point in the international debate and in the dialogue with our social partners and civil society. International organisations have produced important studies, and Germany is working on them as a priority for the next G20

**G7 offers a unique forum for members to rethink labour and social policies**

**Welfare systems need to be reshaped so they can include new forms of work**

PIXELFUSION3D/GETTYIMAGES

summit it will host in July in Hamburg and for the discussions of G20 labour ministers in Bad Neuenahr on 18–19 May. Given the reflections and the experiences so far collected, it also is time to address these issues at the G7 level, focusing on the nature of our economies and bearing in mind the added value that the G7 could provide to identifying common solutions, although they may vary around the world.

The pace and scale of technological progress concern some of our citizens, as the world may appear to be more complex, more volatile and more uncertain. Some are increasingly sceptical or even hostile to globalisation and fear changes brought by technological progress such as automation, artificial intelligence and digitalisation. One key objective of policy interventions is therefore to restore trust in the future of work, reaffirming social ownership over the process of innovation. Our aim is to explore opportunities to address concrete objectives and propose operational follow-up models and forms of structured and stable collaboration. The G7 is a unique forum to share our experiences and rethink our labour and social policies with a coordinated approach to our common challenges.

### Tackling inequalities

Some issues deserve special attention. One is social protection, which is crucial in order to ensure that workers and families can get the most out of technological change and contribute to it. We also need to tackle the issue of inequalities, the non-neutrality of technological change and governance of technological trends. Low-skilled workers and disadvantaged groups face serious risks of exclusion from social and economic life. However, technological change is not neutral: technology may produce different results in terms of employment and inequality, depending on different policy choices. A deeper, shared understanding of where jobs

## Giuliano Poletti



### Minister of Labour and Social Policies Italy

*Giuliano Poletti was appointed Italy's Minister of Labour and Social Policies in 2014. A trained agronomist, before entering politics he was President of Legacoop Imola, the national cooperative federation of Italy; President of Coopfond, the fund for the cooperative promotion of Legacoop); and President of the Alliance of the Cooperatives, the national coordination unit consisting of AGCI, Concoopoperative and Legacoop.*

 @PolettiGiuliano  
 [www.lavoro.gov.it](http://www.lavoro.gov.it)

are likely to be created and lost and of what needs to be done to ensure the potential benefits are equitably shared is the essential foundation for sound policymaking and strengthened social cohesion.

With regard to ageing populations and the demographic challenge, the changing world of work may need welfare systems to be reshaped so they are more responsive and flexible to include new forms of work. Work based on digital platforms and the gig economy are issues we still need to fully understand, and here cooperation and the exchange of experiences may be extremely useful. Above all, we need to pay special attention to youth, to ensure that the opportunities offered by innovation will be spread across generations.

We are confident that we can agree on a concrete operational follow-up to make our cooperation strong and permanent and to strengthen the G7's leading role, with a view to securing strong continuity on policy discussions, the dissemination of good practices and the achievement of better coordinated national solutions.

### Including people and communities

Our ministerial meeting takes place during a G7 week in September dedicated entirely to the challenges of the fourth Industrial Revolution. G7 ministers of labour and social policies as well as ministers of industry, education and research will discuss those challenges in separate sessions, focusing on their specific competencies, but with an integrated and coordinated approach. We commit to making labour a vital ingredient of the change: the way we shape the future of work and welfare systems will have a significant impact on the innovation process itself. We must make every effort to ensure that people and communities are not left behind, and that fundamental rights and principles are respected throughout this process of change. **G7**

## KEY TAKEAWAYS

The effect of climate change on health is the subject of much advanced study

Changes in the frequency of extreme weather directly affect people and animals

# Transforming the well-being of the world

A global strategy is needed to mitigate the effects of climate change on planetary health, writes **Beatrice Lorenzin**

Building upon the achievements of past presidencies, the Italian G7 presidency intends to introduce a focus on the impact of climate change on health.

The fight against climate change and its impacts is a well-known and universally acknowledged priority, incorporated by the United Nations in its Sustainable Development Goal 13 to “take urgent action to combat climate change and its impacts” and tackled by the international community in the framework of the 2015 Paris and the 2016 Marrakech climate conferences.

The specific issue of the impact of climate change on health is also, on the whole, at an advanced stage of study. In 2003 the World Health Organization (WHO) published *Climate Change and Human Health – Risks and Responses*, in collaboration with the World Meteorological Organization and the United Nations Environment Programme. Prestigious US institutions such as the National Academy of Medicine have been studying the topic since 2007, examining correlations between climate change and health through the formulation of several predictive algorithms that have been further elaborated by both the 2010 Parma Declaration on Environment and Health and the 2015 Paris climate conference (with the WHO-affiliated Global Climate and Health Alliance).

Studies have highlighted how changes in the frequency of extreme weather conditions and events such as heatwaves, droughts and heavy rains have a direct effect on humans and animals with diseases predominantly linked to alterations in homeostasis and physiopathology. There have been spikes in mortality linked particularly to the impact on fragile and vulnerable persons (the elderly and children, and also those with chronic diseases, asthma and allergic predispositions), with changes also in the quality of livestock yield.

### Food integrity in peril

Climate change affects the food system and human health in terms of food availability, food security and safety, and livelihood assets. In fact, climate change may have an impact at various stages of the food chain, from primary production through to consumption, and could, moreover, lead to an altered chemical and pathogen presence in food. Those changes will particularly affect the most vulnerable groups of people, leading to malnutrition syndromes.

Changes in ecosystems contribute to sparking migratory phenomena. The G7 leaders’ declaration at the 2015 Elmau Summit and the G7 health ministers’ Kobe Communiqué in 2016 referred to health and migration explicitly.



Caption here

# 2003

The year the World Health Organization published *Climate Change and Human Health – Risks and Responses*

Climate change has effects on air quality, vector-borne disease and food

The One Health approach to risk prevention is strongly promoted



Treating a pig for swine flu embodies the One Health approach

YNOCCLUB/ISTOCKPHOTO

## Beatrice Lorenzin



Minister of Health  
**Italy**

*Beatrice Lorenzin has been Minister of Health since 2013. She has been a Member of the Italian parliament since 2008 and belongs to the New Centre Right (NCD) party. She joined Forza Italia in 1997 and was elected to Rome's city council in 1997 for two consecutive mandates.*

[@BeaLorenzin](https://twitter.com/BeaLorenzin)  
[www.salute.gov.it](http://www.salute.gov.it)

The Italian presidency also intends to promote a discussion on gender budgeting for health as a way to better promote and implement local and global gender-sensitive approaches to healthcare in both advanced economies and developing countries. One impact of climate change not yet fully assessed is the spread of antimicrobial resistance affecting both humans and animals.

### 'One health and health for all'

The objective of the Italian G7 presidency is to formulate and launch the Global Strategy for the Mitigation of the Effects of Climate Change on Planetary Health. This should define the high priorities and policies, and also translate them into practical tools according to the identified principle of 'one health and health for all'.

Even if mitigation is started immediately, it would take 50 years to return the world to where it was. In the meantime, humans need to survive, remain as resilient as possible and develop adaptation strategies.

Climate change has effects on planetary health – “the health of the human civilisation and the state of the natural systems on which it depends”, as *The Lancet Planetary Health* says – through its impacts on several different areas such as extreme events, air pollution, vector-borne diseases, food systems and nutrition, animal health at the animal-human interface, migrant population and antimicrobial resistance.

### Risk prevention

To prevent the risks and to mitigate the effects of climate change on health, as Italy's Minister of Health responsible for public and animal health as well as for food safety and nutrition, in recognition that human health and animal health are both interdependent and bound to the health of the ecosystems in which they exist, I strongly promote the One Health approach to identify cross-sectoral actions for commitment and advocacy. **G7**

60

officers make up the Italian Unite4Heritage task force

2017

UN Security Council adopts its first ever resolution to focus on cultural heritage

# Heritage is precious

*Dario Franceschini, Italian Minister of Cultural Heritage and Tourism, describes the initiatives that are taking place to protect irreplaceable sites and objects*

*"Being the theatre of wars and natural disasters has led to Italy developing a high level of proficiency in conserving cultural treasures"*

Italy assumed the G7 presidency on 1 January 2017, promoting, for the first time, a meeting of the ministers of culture of the G7 members to be held in Florence on the theme of 'Culture as an instrument of dialogue among peoples'.

Supporting intercultural dialogue and building a common sentiment among nations are both fundamental instruments of cooperation, integration, solidarity, growth and sustainable development. Now, more than ever, this must become a strong commitment of the international community. Cultural heritage is too frequently deliberately attacked because of its intrinsic value as a symbol of a civilisation, a religion, a different identity. Archeological sites, monuments, paintings and ancient books are destroyed, pillaged and looted, leading to illicit trafficking, which is a main channel for financing international terrorism. We must stand united in these terrible times, by opposing – using all possible means – any aggression to our societies. We must defend cultural heritage in crisis zones all over the world.

## Sophisticated techniques

This discussion was initiated in Italy a long time ago. Our country inherited an

enormous cultural heritage and has been the theatre of wars and natural disasters that have threatened its survival. Italy has thus developed a high level of proficiency and advanced techniques in this field. This is exemplified by specific expertise that is studied and appreciated worldwide. Italian restorers have been and remain employed in Iraq, Iran, Jordan, Israel, India and China. Our country is also the first to establish, in 1969, a national police force dedicated to defending cultural heritage: the Comando Carabinieri Tutela Patrimonio Culturale. It has trained personnel to develop great expertise in using highly sophisticated investigative techniques that have been at the disposal of the international community. Specifically, it excels in training many different police forces all over the world, including those with front-line employment in Iraq.

## Establishing Blue Helmets

All of this legitimises Italy in leading the support for establishing the Blue Helmets for Culture. Discussions on this issue started in March 2015 with an interview in *The Guardian* on the proposal to create a United Nations force dedicated to defending World Heritage

## KEY TAKEAWAYS

Cultural heritage is often attacked because it symbolises a civilisation, a religion, a different identity

Italy has established a task force which will take part in international 'culture keeping' missions

The international community is committed to defend world heritage





## Dario Franceschini

Minister of Cultural  
Heritage and Tourism  
**Italy**

*Dario Franceschini is Italy's Minister of Cultural Heritage, Activities and for Tourism and the former Minister for Parliamentary Relations and Coordination of Government Activities. A lawyer by training and author of several novels, he was first elected to the legislature in 2013. He served as Under Secretary to the Prime Minister with responsibility for Institutional Reforms in the second D'Alema government and the second Amato government.*

 @dariofrance  
 [www.beniculturali.it](http://www.beniculturali.it)

sites. It was then debated at the meeting of culture ministers at Expo 2015, where 83 countries endorsed the Declaration of Milan on 1 August, a firm condemnation of any act of violence against culture. UNESCO approved a historic resolution on 13 November 2015 that commits every country to establish a national task force to defend cultural heritage and asks the UN to discuss including a cultural component in peacekeeping missions. Italy strongly supported this resolution, which was adopted by the UN Security Council on 24 March 2017. In addition, Italy made a commitment that allowed an agreement for the institution of a Category 2 centre in Turin under the auspices of UNESCO to train the Blue Helmets for Culture and to establish the Italian Unite4Heritage task force – the first of its kind in any UNESCO member country – composed of 60 officers at the disposal of the international community in 'culture keeping' missions.

By promoting the first meeting of G7 culture ministers and the representatives of the international culture organisations on 30–31 March 2017, Italy confirms its willingness to play a central role in cultural leadership. The meeting produced the 'Joint Declaration of the Ministers of Culture of G7 on the Occasion of the Meeting: Culture as an Instrument for Dialogue Among Peoples'. It confirmed the commitment of the international community to defend and recover world heritage threatened by wars, terrorism and natural calamities and to fight the illicit trafficking of cultural heritage. It also supported the need for a cultural component in UN peacekeeping missions.

Italy and Florence as hosts welcomed the first G7 culture summit. Here, in the cradle of the Renaissance, the international community can begin to develop today a new awareness of the role and the value that cultural heritage will play in the world of tomorrow. **G7**

# Infrastructure's role in social integration

*Physical communication networks need to be developed ahead of intangible ones, if we are to fully benefit from enhanced connected technologies, writes **Graziano Delrio**, Italian Minister of Infrastructures and Transport*

Rediscovering the social value of infrastructure is the theme we have proposed for the meeting of G7 transport ministers that I will host on 21–22 June 2017 in Cagliari, Sardinia – a region beautiful both for its harsh nature and its Mediterranean hospitality; an island too that symbolises rights to connections and accessibility.

In such a place of beauty and strength, challenging for its relationship with the mainland, we choose to focus on policies for sustainable mobility from a different perspective: the social point of view of transport infrastructure.

In fact, infrastructural networks, even before non-material ones, are crucial for real exchanges and relationships among people: they represent a means to overcome physical barriers and to create opportunities for interaction among cultures and economies, people and ideas. That virtual exchange, which the internet has made so easy, becomes tangible only when we are able to implement efficient physical networks.

## **Aiming for social sustainability**

Infrastructure and connectivity play a key role in contributing to sustainable development. Social sustainability is achieved when transport infrastructure is based upon the real needs of territories and populations, bringing solutions to difficult contexts that respect common values.

## KEY TAKEAWAYS

Social sustainability is achieved when transport infrastructure is based upon real needs of territories and people

Improving transport infrastructure can help improve individuals' quality of life

G7 transport ministers meeting in Cagliari will continue the work set up at Karuizawa in 2016



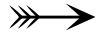
Social sustainability is the third pillar of sustainable infrastructure and transport, related to accessibility, equity and social cohesion from several perspectives.

First, on the scientific and methodological level, there is neither an idea nor a shared approach to assessing the transport equity of infrastructure projects. In this respect, it would be useful to figure out a cultural rebirth of infrastructure design and planning that make technicians and administrators aware of the social dimensions linked to maintaining existing works, reusing quality and enhancing public goods, issues already wisely discussed at the G7 transport ministerial meeting in Karuizawa in 2016 and that fall entirely within this topic.

From a cultural and political point of view, the social dimension is linked to how transport infrastructure might also be a tool for social integration and for the recognition of the identities of different communities. They can help improve the quality of life and individuals' well-being, to the benefit of



P112

For more on Infrastructure  
by Sir Suma Chakrabarti

YONGYUAN / ISTOCK IMAGES

## Graziano Delrio



Minister of Infrastructures  
and Transport  
**Italy**

*Graziano Delrio was appointed Italy's Minister of Infrastructures and Transport in April 2015. He held the position of Undersecretary to the Presidency to the Council of Ministers and Secretary of the Council of Ministers from February 2014 to April 2015. He was appointed Minister for Regional Affairs and Local Autonomies on April 2013, with responsibility for Sport Activities from June 2013, a position he held until February 2014. Before entering politics, he was a doctor and researcher at University of Modena and Reggio Emilia, specialising in endocrinology.*

[@graziano\\_delrio](https://twitter.com/graziano_delrio)  
[www.mit.gov.it](http://www.mit.gov.it)

economic, physical and cultural diversity, particularly for disadvantaged users.

At the same time, transport infrastructure should be able to demonstrate its nature as a public good that is a vehicle for opportunities and democracy. In this sense, we should recall the dimension of community empowerment that comes from promoting works that are discussed for their impact and shared for their usefulness by involving citizens in public decisions.

### Teaming up on technology research

Finally, the safety and security of people, specifically with reference to transport and the development of advanced technologies, represent another primary right with social significance for citizens. At Cagliari, we must continue working on this aspect, after the work set up at the G7 transport ministers' meeting in Karuizawa. There will be the opportunity to update the efforts of the working group set up by the transport ministers last year, where we agreed on

the need to share national interests and collaborate in the research on automated and connected technologies for vehicles, in order to converge on shared standards.

### Establishing a common narrative

In all countries, there were – and there are – success stories in infrastructure that have been conveyed through the generations, as true common achievements for progress. Today we feel the need to reconnect the local dimension with the national one, and up to the continental and global levels, in a unique common narrative of increased mobility rights for all citizens, without exception, in a balance of values and principles, with attention paid to listening, respect and dialogue with the communities that will benefit from great infrastructure. In order to resume this narrative thread, we will ask the G7 transport ministers to present further best practices that may contribute positively to promoting economic, environmental or social transport infrastructure. **G7**

67.2%

OECD area employment rate in Q4 2016

0.7%

Increase in real GDP in OECD area in Q4 2016

# Fighting insecurity

*The B7 summit in Rome focused on the priorities of innovation, sustainability and global trade governance, in the face of protectionism and populism, writes **Vincenzo Boccia***

## KEY TAKEAWAYS

Effectively governed and coordinated trade fosters many social benefits

The B7 asks the G7 to join forces on a shared proposal to reform and revitalise the World Trade Organization

Access to finance is vital for SMEs

The B7 Italy (the 2017 summit of the business leaders of G7 members) took place on 30–31 March in Rome. In its final declaration it conveyed the recommendations from the G7 business leaders to Italy's Prime Minister Paolo Gentiloni for the Taormina Summit, which he will host. Italy's ministers of foreign affairs, economy and finance, economic development, and environment attended the event with the business leaders.

### Advantages that trade brings

Our final declaration focuses on two major priorities: 'Trade Governance' and 'Innovation and Sustainability'. As for the first, the B7 clearly stated that trade governance is losing pace with globalisation, and protectionist trends are unprecedented in recent history. Our concern is that a feeling of insecurity is leading to the rise of populist movements fuelled by the perception that globalisation creates inequalities and unemployment. Business believes that trade is not the problem. Instead, it is in itself an essential part of the solution. When effectively governed, and in coordination with other policies, trade not only favours the production and exchange of goods and services, but also fosters job creation, social justice, inclusion and sustainable development.

With this in mind, the B7 sent a strong signal to the G7 to join forces and submit a shared proposal to reform and revitalise

the World Trade Organization (WTO) at its ministerial conference in Buenos Aires in December this year. Business also called on the G7 to support the rapid entry into force of the Canada-European Union Comprehensive Economic and Trade Agreement (CETA) and to conclude the trade deal between the EU and Japan. These agreements will pave the way to a new multilateral trading scheme based on market access and liberalisation in a framework of shared rules set up for the benefit of business, economies and civil societies as a whole. We also urged the G7 to mandate the WTO to start plurilateral negotiations on new matters such as digital trade, investment and competition.

As for the second priority, enhanced innovation and sustainability are key to achieving the overarching goal of economic growth. Their combination will shape the future industrial development by guiding the transition towards a digitised, innovative, low-emission and more circular economy. Business is concerned by the challenges confronting the planet. We are fully committed to conciliating economic growth, creating jobs and ensuring environmental sustainability. The results achieved by the manufacturing and power sectors in fields such as reducing carbon emissions, saving energy or managing waste bear witness to the magnitude of investments that are constantly carried out in the research and development of innovative and sustainable products, processes and technologies.



## Vincenzo Boccia

President  
**Confindustria**

*Vincenzo Boccia became President of Confindustria, the organisation of Italian entrepreneurs, in May 2016. He started in the Young Entrepreneurs of Confindustria and became national Vice President in 2000. From 2003 to 2007 he was President of Confindustria Assafrica & Mediterranean and then a member of the Council of Assografici. From 2009 to 2013 he was President of Confindustria's Piccola Industria, focused on SMEs' development and growth, and later Vice President of the Confederation. He is also the CEO of Arti Grafiche Boccia, an Italian graphics and printing company.*

[@Confindustria](https://twitter.com/Confindustria)  
[www.confindustria.it](http://www.confindustria.it)

*"Our concern is that a feeling of insecurity is leading to the rise of populist movements"*

### Helping SMEs obtain finance

However, business cannot do it alone. Access to finance is vital. Financing schemes, particularly those for small and medium-sized enterprises (SMEs), should be set up to boost transnational partnerships and global supply chains. The B7 has given the G7 concrete recommendations to match business objectives for global competitiveness and environmental sustainability targets.

The B7 reached out to the B20 by holding a workshop on 'Resource Efficiency' co-organised with the Global Business Coalition, the association of business organisations in the G20 members, at Confindustria's HQ in Rome before the B7 began. Included in Germany's B20 programme, and interacting with Italy's G7, the workshop assessed the roles of institutions and business in drawing a common road map for the efficient and sustainable use of available resources and addressed its conclusions to both the G7 Taormina Summit and the G20 Hamburg Summit. Several distinguished speakers addressed the audience, among them Gian Luca Galletti, Italy's Minister of the Environment, and Kristalina Georgieva, CEO of the World Bank.

Confindustria thus bridged the two governance forums of the G7 and the G20, showing how conscious business is of its role and how deeply it is engaged in shaping a better world for future generations. Next year is the B7 Canada, so I wish my Canadian colleagues great success for 2018. **G7**



Prince Sultan Bin Abdulaziz  
International Prize for Water



## Recognizing Innovation

### Winners for the 7th Award (2016)



Creativity  
Prize

#### Creativity Prize

The Prize was shared by two teams of researchers:

**1) Dr. Rita Colwell (University of Maryland at College Park) and Dr. Shafiqul Islam (Tufts University, USA)**

for using chlorophyll information from satellite data to predict cholera outbreaks at least three to six months in advance.

**2) Dr. Peter J. Webster (Georgia Institute of Technology, USA)**

for applying knowledge of the effects of ocean-atmosphere interactions on monsoon strength to provide one to two-week lead time forecasts of monsoonal floods for highly populated coastal regions.



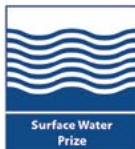
Dr. Rita Colwell



Dr. Shafiqul Islam



Dr. Peter J. Webster



Surface Water  
Prize

#### Surface Water Prize

**Dr. Gary Parker (University of Illinois Urbana-Champaign, USA)**

for contributing to our understanding of meandering rivers, the shapes they take, and how they change themselves and their floodplains as they migrate.



Dr. Gary Parker



Groundwater  
Prize

#### Groundwater Prize

**Dr. Tissa H. Illangasekare (Colorado School of Mines, USA)**

for improving the fundamental understanding of fluid flow and chemical transport in porous media, leading to the reliable prediction of the long-term fate of pollutants in groundwater systems.



Dr. Tissa H. Illangasekare



Alternative Water  
Resources Prize

#### Alternative Water Resources Prize

**Dr. Rong Wang & Dr. Anthony G. Fane (Nanyang Technological University, Singapore)**

for developing hollow fibre membranes that combine forward osmosis with a reverse osmosis (RO)-like inner selective layer and a previously undiscovered positively charged nanofiltration (NF)-like outer selective layer, which effectively reduces the effects of scaling and flux losses.



Dr. R. Wang Dr. A. G. Fane



Water Management &  
Protection Prize

#### Water Management and Protection Prize

**Dr. Daniel P. Loucks (Cornell University, USA)**

for the development and implementation of systems tools that provide an effective, dynamic, and successful framework for addressing practical water resources management problems worldwide.



Dr. Daniel P. Loucks

Nominations are open for the 8th Award. Nominations can be made online until 31 December 2017.

[www.psipw.org](http://www.psipw.org)  
email: [info@psipw.org](mailto:info@psipw.org)

---

# Human Mobility, Terrorism, Corruption & Security

---

## COMPLIANCE SCORES

---

*The average level at which G7 members have complied with their priority citizen safety commitments from the 2016 Ise-Shima Summit*



Migration/refugees

+0.70 **85%**

Crime and corruption

+0.45 **73%**

Terrorism

+0.61 **81%**

Regional security

+0.62 **81%**

+1 means full compliance, 0 means work in progress or partial compliance, and -1 means no compliance or action antithetical to the commitment.  
Based on a study by the G7 Research Group

---

# Fred van Leeuwen



General Secretary  
**Education International**

*Fred van Leeuwen is General Secretary of Education International, the global federation that represents organisations of teachers and other education employees across the globe. Education International is the voice of the teaching profession, speaking for nearly 400 unions and associations in more than 170 countries and territories and represents 32 million teachers and education employees in institutions ranging from early childhood to university.*

 @fredvanleeuwen  
 [www.ei-ie.org](http://www.ei-ie.org)





# A FAIR CHANCE IN LIFE

*For refugees to have any hope of future prosperity, preserving access to education is paramount, explains **Fred van Leeuwen***



Children sit on stairs in the refugee camp of Lagadikia, some 40km North of Thessaloniki in Greece

**65.3M** forcibly displaced people worldwide

**6%** of the world's refugees being hosted in the Americas

**M**ost refugees are fleeing for their lives, often because of unspeakable violence and conditions that have deprived them of the right to remain in their homelands. Global political mistakes and inertia have failed to address the root causes of the massive flow of refugees.

Refugees have moved to the front and centre of the political debate in Europe and the United States and yet those countries are not carrying the largest share of refugees in the world. Of the 65.3 million forcibly displaced persons, according to the office of the United Nations High Commissioner for Refugees, only 6% are being hosted in the Americas and 12% in Europe. Forcibly displaced persons include refugees fleeing armed conflicts, human rights abuses and repression, but also people escaping extreme poverty and the effects of climate change.

There must be a public debate where responsible, democratic voices defend sound refugee policies that are in line with international treaty obligations. To have such a debate requires the education of citizens, present and future. Hostility must be countered by political leaders and all persons of goodwill. Reason will not prevail unless fearmongers are challenged with human values and real, not alternative, facts.

**Upholding human rights**

Forcibly displaced persons are found on all continents. Some are escaping horrendous war-time conditions, such as those from Syria and Iraq, whose very survival is at stake. Accepting refugees in Europe, the US and elsewhere and dealing with the refugee crisis in the region requires addressing a number of issues that are far from academic or abstract. They include such serious issues as accommodation and detention, which often interfere with the exercise of refugees’



*Volunteer teachers arrange an improvised school for refugee children*

fundamental rights, including the right to education.

Education is not the only solution for refugees and host populations, but there is no solution without it. Education is about peace and tolerance. It is about critical thinking and free discussion. It is also ‘user-friendly’ for hopes and dreams and provides the best opportunity for refugees to integrate into their host countries.

**Providing sufficient resources**

Governments must provide access to public education for refugees and allocate the necessary resources to ensure that they receive quality education, rather than forcing schools to thinly spread already scarce means.

The conditions for good quality education include small class sizes that



ISTOCK / SILKFACTORY

*Quality learning depends on quality teaching. And teacher training, development, and support are vital to quality teaching*



enable teachers to have more direct contact with students, and professional autonomy so that they can play a central role in curriculum development, which is even more critical for forcibly displaced children.

Quality education for refugees is not just for the young, but for all ages. Often, they will require language training and other skills to adapt to their new homelands.

**Empathy is key**

As with other students, quality learning depends on quality teaching. And teacher training, development and support are vital to quality teaching. Professional skills need to be developed to allow teachers to better understand and address the education needs of refugees as well as the trauma faced by many due to what they have experienced, but also because of the shock of being uprooted.

A major challenge for schools, but also for communities (for example, housing and other services), is unaccompanied minors. There are many such refugees. They are separated from their homelands, also from their families. In some cases, they are the only survivors in their families. They have often experienced dangerous and traumatic journeys and conditions (including, at times, trafficking) and require attention and sensitivity from professional teachers and school leaders, comprehensive policies, and cooperation with other public bodies.



ISTOCK / SILKFACTORY

Volunteers serving lunch outside the Souda refugee camp in Greece

Many refugees are teachers. In some cases, they were targets of repressive regimes or non-state actors perpetrating violence and oppression. As far as possible, they should be involved in education under the leadership of certified teachers and their teaching credentials should be recognised.

The mission of education includes democracy, respect and human rights, values which may or may not have been part of education in refugees' countries of origin. In some cases, this will also require special attention to the rights of girls and women. Girls may have been deprived of education or other rights. This entails emphasis on equality issues in education, and also engagement with parents and communities.

Education concerning refugees is not, however, just about educating refugees. It is also about educating non-refugee children and host communities. Refugees too often face barriers of discrimination, bigotry and xenophobia. It is difficult to flourish where you are planted if the soil has been poisoned.

Refugees contribute to communities and economies, and also to education. As John Dewey, the American educator and philosopher said early in the last century, "The intermingling in the school of youth of different races, differing religions, and unlike customs creates for all a new and broader environment." **67**

**KEY TAKEAWAYS**

**Political mistakes and inertia failed to address cause of mass flow of refugees**

**Governments must provide refugees with access to public education**

**Unaccompanied minors present a major challenge**

# A reflection of progress

Migration follows economic change and should be embraced for its positive effects, writes **William Lacy Swing**



## KEY TAKEAWAYS

Centuries of migration have helped create freer trade worldwide

Anti-migrant nationalism threatens the integration of recent arrivals

The UN Together campaign seeks to combat stereotypes of migrants

As long as borders remain open, humankind must remain free

The world’s experience with globalisation — the widespread transfer of peoples, technologies and cultures — did not begin in our time. Scholars argue that it dates back to 1492, when European migration, together with movements of Asians, Africans and Native Americans, forged the global relationships that help shape life to this day.

This centuries-old process has led to ever freer trade networks for goods and services, and ever increasing human mobility — the labour and intellectual property components of our codependent economies — to raise prosperity globally.

Migration embodies all we have accomplished in responding to human ambition and promoting the dignity and freedom of men and women worldwide. Yet it is that progress — which has lifted billions from poverty — that now is being shaken to its core, with a return to anti-migrant nationalism. This is a threat we cannot ignore.

### Fighting fear of change

The forces doing the shaking arrive under different names: ‘populism’, ‘xenophobia’. Each is a side of one coin: fear of change on one side backed by susceptibility to media images that pound away at only negative

tropes, often having little basis in fact.

‘Your jobs are deserting you’, goes one trope, as corporate growth is thought to flee to other countries. Or ‘your country is disappearing’, as foreigners teem onto your shores. Or ‘these newcomers just won’t be assimilated’ — as if such criticism was not levelled at, and debunked by, every wave of ‘newcomers’ that ever arrived before.

Nonetheless, we have to face these fears and push back. We must all — be we leaders in government, civil society and the corporate world — demonstrate the many ways we can communicate a different message. At the International Organization for Migration (IOM), communicating this message is one of our core missions.

One way we do so is with the United Nations ‘Together’ campaign, which combats stereotypes of migrants and refugees with positive stories that reveal the energy released to benefit us all when newcomers renew our cities, establish new industries and create opportunities for all in their new surroundings.

### Great successes

IOM’s ‘I am a migrant’ campaign profiles individual migration success stories online. For example, Jim Yong Kim, the Korean preschooler whose journey through a Texas and Iowa childhood led ultimately to

*"We must do more than demonstrate how migrants triumph over adversity to join us"*



Washington DC, where today he is President of the World Bank.

Or Cecilia Violetta López, the daughter of itinerant farmworkers from Mexico, who from a childhood in Idaho rose into a classical music career, performing in *La Traviata* and *Madam Butterfly* on the world's great opera stages.

### A universal movement

Of course, we must do more than demonstrate how migrants triumph over adversity to join us. We need to show how they make us all — whether we come from countries where our family roots extend back generations or whether we are still waiting for the children who will be the first to claim our 'native' status.

The 'us' I am speaking of are those thriving within any free society that welcomes the talent of the young. The foreigner who arrives as a restaurant worker but becomes an award-winning chef. The Asian website designer whose talents are spotted by a recruiter far away in Europe, who then sends the designer to join a start-up in California. Or the entrepreneur who travels 'here' to earn a fortune, gain skills and, through both, enrich those 'back home'.

I speak here in generalities to demonstrate just how universal this movement across has become. Any of these

## William Lacy Swing

Director General  
**International  
Organization for Migration**

*William Lacy Swing has been the Director General of the International Organization for Migration since 2008. Previously he served as United Nations Special Representative of the Secretary General for Democratic Republic of the Congo, Special Representative of the Secretary General for Western Sahara and Chief of Mission, United Nations Mission for the Referendum in Western Sahara. Swing's 40-year diplomatic career includes posts as US ambassador to South Africa, Nigeria, Liberia, the Democratic Republic of the Congo, the former People's Republic of the Congo (Congo Brazzaville) and Haiti.*

 @IOMchief  
 www.iom.int

examples play out across boundaries that barely existed a generation ago.

### Remarkable stories

These are not journeys that occur solely between poor lands and richer ones, but anywhere. We could be talking about the Nigerian trader now working in Guangzhou, which is home today to nearly 200,000 West Africans. Or the Ethiopian jazz musician who has won legions of fans in Johannesburg. Or the Sénégalais who in 2016 won Best Paris Baguette prize for his exquisite baguettes. Or the turban-wearing fan who has become a sensation in Canada doing *Hockey Night in Punjabi* broadcasts from his new home in Vancouver.

Just as remarkable, and possibly more important, are the hidden stories that affect all of us: the thousands of migrant health workers filling crucial labour shortages everywhere from Iceland to Zimbabwe. Or those risk-resistant new homeowners who relentlessly restore abandoned neighbourhoods in cities such as Liverpool, Detroit or Dresden.

There is a proverb: as long as books stay open, minds cannot be closed. We might say something similar about the future of our planet: as long as borders remain open, humankind must remain free. Let's work together to make that hope real. **G7**



*Combating terrorist financing is a top priority for the FATF, and we have made significant progress*



communities to support innovation in financial services, while maintaining transparency and mitigating the associated risks.

The FATF is also increasing its focus on operational issues. Direct engagement with its members' financial intelligence units provides an important insight into the challenges they face in analysing suspicious financial transactions. It highlights the additional powers and tools they need to facilitate their important work and improve the effective use of intelligence.

**Choking off terrorism-related flows**

Combating terrorist financing is a top priority for the FATF, and we have made significant progress. The FATF continuously updates its knowledge of methods used to raise, move and use funds in support of terrorism, in particular by the so-called Islamic State. This understanding is essential to effectively choke off terrorism-related financial flows.

As the threat from terrorism and its financing evolves, the FATF continues to implement effective global countermeasures to help identify actors that have committed acts of terror and, more importantly, to help prevent these acts before they occur.

Criminals and terrorists exploit any loophole or weakness in the international financial system. This makes international cooperation crucial, as the effective sharing of intelligence helps disrupt terrorist financing and identify cases of money laundering. The FATF is working to determine the challenges to inter-agency information-sharing, and examples of how to improve such sharing. As primary entry points into the financial system, banks, financial institutions and other private sector agencies hold essential information. The FATF engages directly with the private sector to develop best practices that will help them detect suspicious transactions and share high-quality intelligence.

**Implementing effectively**

Through peer reviews, the FATF seeks evidence that a country's efforts to tackle money laundering and terrorist financing are delivering expected results. The effective implementation of the FATF standards is critical in addressing serious crimes such as



# Staunching the tide

*Helping countries cut off the inflow of the proceeds of crime and terrorist financing requires a robust, complex approach, writes Juan Manuel Vega-Serrano*

The essential role of the Financial Action Task Force (FATF) is to prevent the proceeds of crime and terrorism-related funds from entering the global financial system. In this effort, the G7 and the FATF are intrinsically linked. Twenty-seven years ago, the G7 created the FATF. Since then, the FATF has significantly expanded its focus from money laundering to address new and changing threats. Today, the FATF provides powerful standards to protect the financial system, assesses how countries implement these standards in a way that delivers results and engages countries that fail to do so.

It has always been an important priority for the FATF to look ahead at developments that will affect the international financial system. This allows the FATF to adapt its standards so that they continue to provide countries with the strongest tools possible against money laundering, terrorist financing and other threats.

**Building a constructive dialogue**

The way people manage, move and use funds is changing at an unprecedented pace. Innovations offer many benefits, such as increased efficiency and financial inclusion, but can also provide opportunities for criminals and terrorists. The FATF is developing a constructive dialogue with the fintech and regulatory technology

## KEY TAKEAWAYS

The FATF has expanded its focus from money laundering to new threats

International cooperation is vital in order to tackle financial crime

Thorough, accurate risk assessment helps to tailor appropriate measures



REUTERS/JOSE CABEZAS

Businessman Jose Adan Salazar is escorted by police after his detention under money laundering charges, in San Salvador, El Salvador.

# Juan Manuel Vega-Serrano



President  
**Financial Action Task Force**

*Juan Manuel Vega-Serrano became President of the Financial Action Task Force (FATF) in July 2016. He is the Director and CEO of Servicio Ejecutivo de la Comisión de Prevención del Blanqueo de Capitales e Infracciones Monetarias de España (SEPBLAC), Spain's Financial Intelligence Unit and Anti-Money Laundering and Countering Financing of Terrorism (AML/CFT) Supervisory Authority. In 2001 he became Assistant Deputy Director General of Spain's Treasury and began attending FATF meetings. In 2005, he was appointed Secretary of the Commission for the Prevention of Money Laundering, where he promoted a comprehensive revision of Spain's AML/CFT legal framework.*

[@FATFNews](https://twitter.com/FATFNews)  
[www.fatf-gafi.org](http://www.fatf-gafi.org)

tax evasion. Assessors pay particularly close attention to whether good quality information is being shared in a timely way.

The challenge lies in effective implementation, which is more than just adopting rules and regulations. For each country, the cornerstone of an effective anti-money laundering and counterterrorist financing regime is a thorough understanding of the risks it faces. A risk-based approach ensures that measures to protect the global financial system are commensurate with the risk. An indiscriminate tick-box approach can lead to de-risking, or excluding people or sectors such as non-profit organisations or money remitters from access to regulated financial products and driving them to seek unregulated alternatives that will increase the risk of illicit transactions. The FATF is

working to develop policy responses to prevent unnecessary restrictions on access to financial services and to promote financial inclusion for under-served or vulnerable populations.

### **G7 commitment to FATF standards**

The FATF has clarified that the risk-based approach for financial institutions as well as national authorities responsible for supervising that financial and non-financial sectors understand the risks they face and take the necessary preventive measures in line with these risks.

The G7's commitment to fully and effectively implement the FATF standards and its continued support for FATF work will help drive efforts to protect the international financial system from the proceeds of crime or terrorism-related financial flows. **G7**



# Taking bold steps

*Addressing the crises and challenges in the Middle East and North Africa calls for a multi-layered approach, writes **HE Dr Bandar MH Hajjar***

## KEY TAKEAWAYS

**Major challenges endanger citizens' stability and safety**

**In the MENA region more than 16 million people are refugees or displaced**

**Many countries in the region have been hit hard by the decline in oil prices**

The Middle East and North Africa (MENA) region faces multiple crises and challenges that threaten its stability and have global implications. No straightforward solution to this complex situation exists. However, economic development can be a powerful lever to address some underlying causes. The Islamic Development Bank (IsDB) Group, a key development actor in the region, fully endorses this vision and incorporated it in its long-term strategy – but such an endeavour goes far beyond the capacity of any single institution and calls for coordinated global action.

Major challenges endanger citizens' stability and safety, notably pervasive

fragility and conflicts, economic vulnerability, and youth unemployment.

### **The disastrous effects of conflict**

About one-third of the MENA countries, home to more than 100 million people, are in fragile and conflict-affected situations. Violent conflicts combined with other factors hinder development and trigger spillover effects, with security and humanitarian crises spreading into neighbouring countries. Across the MENA region, more than 16 million people are refugees or displaced. The Syrian crisis has particularly dramatic consequences. By mid 2016, 5.3 million Syrians had fled their country, accounting for 32 per cent of all refugees.

The destructive effects of pervasive conflicts and fragility are compounded by economic vulnerability. Most countries in the region depend heavily on fuel exports and have been hit hard by the sharp decline in oil prices since 2014. Countries that ran large fiscal and external surpluses for years now display sizeable twin deficits. This can be an opportunity for some countries to achieve necessary fiscal and structural reforms to diversify their economies and create more jobs. However, the social costs of such reforms should not be underestimated. It is necessary to design social safety nets to protect vulnerable populations and, most importantly, create new opportunities for youth.





P10

for more on North Africa and the G7 by Beji Caid Essebsi



Refugees crossing the border between Greece and Macedonia in Gevgelija

ISTOCK/BALKANSCAT

## HE Dr Bandar MH Hajjar



President  
**Islamic Development Bank Group**

*HE Dr Bandar MH Hajjar became President of the Islamic Development Bank (IsDB) Group in October 2016, having served as Saudi Arabia's Minister of Hajj from 2011 to 2016. A former professor of economics, he was a member of the Shura Council in Saudi Arabia for 12 years, representing the Council in the Arab Parliamentary Union and the Inter-Parliamentary Union for two years. He also served as Chair of the Coordinating Council for Monitoring Municipal Elections as well as the National Society for Human Rights.*

@isdb\_group  
 www.isdb.org

fragility and economic and non-economic risks, such as climate change-related extreme events, global pandemics and geopolitical risks.

### Promoting quality of life

Sustainable development – embodied in the 2030 Agenda – is at the heart of the IsDB Group's 10-Year Strategic Framework, introduced in 2014. The framework targets three objectives: Inclusiveness and Solidarity, Connectivity for Growth, and Promoting the Development of the Islamic Financial Sector. The bank prioritises promoting the quality of life of people in its member countries by investing substantially in education, health and food security. It also launched several funds to address poverty and promote solidarity.

Among such initiatives is the Lives and Livelihoods Fund, a \$500 million grant facility launched in partnership with the Bill & Melinda Gates Foundation. In 2016, with the World Bank and the United Nations, the IsDB Group helped set up the Concessional Financing Facility to address the impacts of the Syrian refugee crisis. It continues to use Islamic financial instruments to mobilise resources and finance projects, especially for infrastructure development, trade and private investment promotion.

The IsDB Group confronts the challenges faced by many multilateral development banks for mobilising resources to meet members' increasing needs, developing capacity for project implementation and monitoring, mainly in low-income countries, and ensuring the sustainability of development outcomes, especially in fragile situations. A revitalised global partnership is essential to streamline resources for sustainable development. International cooperation for peace and security remains critical to complement the development initiatives. Finally, innovative development solutions involving the private sector, civil society organisations and philanthropic organisations should be promoted for greater development effectiveness.

We expect the G7 leaders at the Taormina Summit to reaffirm their strong commitment to enhancing international cooperation for both security and sustainable development. We ask them to make concessional resources available for the least developed and most fragile economies, while supporting the international mobility of labour, technology and capital. We call for enhanced policy coordination to help stabilise financial markets and commodity markets alike. **G7**



### Instability and conflicts hinder the efficient allocation of resources and deter investment



Persistently high youth unemployment remains a major concern in the MENA region, and could further contribute to social and economic instability. At around 30 per cent, youth unemployment in North Africa and other Arab states is over twice the world average. Urgent reforms are needed in education and labour market regulations. Affirmative action to support female participation is also key.

Instability and conflicts hinder the efficient allocation of resources and deter investment. Similarly, poverty and social exclusion are fertile soils for political instability and conflicts. Therefore, economic development on one hand and peace and stability on the other reinforce each other. Sustainable development, which links economic, social and environmental dimensions, builds resilience against

IMAGE SOURCE

## KEY TAKEAWAYS

Oil and gas from the MENA region provide the bulk of global supplies

Technological advances have resulted in a production boom

# STARK CHALLENGES

*Climate change, falling oil prices and over-reliance on energy subsidies have contributed to instability in the Middle East and Africa, write **David Ramin Jalilvand** and **Kirsten Westphal***

Oil and natural gas from the Middle East and North Africa (MENA) region will continue to provide the bulk of global supplies in the foreseeable future.

According to the International Energy Agency, the world's reliance on hydrocarbons from the region's low-cost producers and members of the Organization of Petroleum Exporting Countries (OPEC) will increase even in the carbon-constrained world aimed for in the 2015 Paris Agreement.

Geopolitical risks, however, are looming and the stability of the region remains under question. Security concerns are paramount in a region suffering from turmoil, political instability, an almost chronic economic crisis and cross-border terrorism. The approaches of Europe and North America, which initially

supported democratic aspirations in the wake of the 2010-11 Arab uprisings, have returned to giving priority to security considerations – with significant repercussions. The desire for stability comes with

the short-term consolidation of authoritarian states. The downside of authoritarian stability, however, is societal stagnation: pressing socio-economic challenges, which caused the uprisings in the first place, remain unaddressed and mount under the surface.

### Changes in the industry

Changes in the field of energy add to this.

The uncertainty of political developments is enhanced by the unpredictability of global, regional and national energy trajectories. These include the boom in unconventional oil and gas production in North America (a result of technological advances), extremely negative effects

42%  
of the world's crude  
oil is produced  
by OPEC

Energy subsidies have underpinned the political legitimacy of governments

Most MENA countries have started diversifying their economies



*Oil survey ship parked in Walvis Bay, Namibia*

ISTOCK



Dr David  
Ramin Jalilvand



Middle East and  
North Africa expert  
**Friedrich Ebert  
Foundation**

*Dr David Ramin Jalilvand works at the Friedrich Ebert Foundation in Berlin, specialising in international politics. He holds a PhD in political science from the Free University of Berlin and studied at the London School of Economics, Moscow State Institute of International Relations and the University of Erfurt.*

@FESOnline  
 www.fes.de

Dr Kirsten  
Westphal



Senior Associate  
**Stiftung Wissenschaft  
und Politik**

*Dr Kirsten Westphal is a Senior Associate at the Stiftung Wissenschaft und Politik. Previously, she was Assistant Professor of International Relations and Foreign Policy at Justus Liebig University Giessen.*

@SWP\_Europa  
 www.swp-berlin.org

*The region's energy story is also becoming as much about demand as it has been about supply*



of climate change in the MENA region (high temperatures, water shortages and rising sea levels will hit the region harder than other parts of the world) as well as questions about the extent to which stricter climate policy goals will be met. This duality of energy and geopolitical developments creates a delicate (energy) security environment, characterised by instability and uncertainty about the future.

#### Leaders' challenges

Governments and leaders across the region are challenged to ensure the accessibility and affordability of energy for their people. For decades, the cheap provision of energy has shaped political and social arrangements in many MENA countries. In energy-abundant countries, access to cheap energy continues to be part of the social contract, giving some degree of legitimacy to largely unelected rulers. But energy subsidies have also underpinned the political legitimacy of governments and stability of regimes in energy-poor countries.

Given the fact that oil prices might remain well below past fiscal break-even points even in the mid-term, the comprehensive subsidisation of energy might no longer be economically sustainable. As most countries in the MENA region have only started diversifying their economies, low energy prices have begun eroding the stability of already fragile states. Throughout the region, the pressure to generate inclusive economic growth, social opportunities and stability in the face of rapidly growing populations is tremendous. Beyond subsidies, most economic diversification strategies, especially in Iran and the countries of the Gulf Cooperation Council, rely on access to abundant and cheap energy for petrochemicals and energy-intensive industries as well as these countries' logistical hubs and airports. Given its political and economic importance, energy is obviously also

central to the foreign policy of many MENA countries, in some cases financing regional and international endeavours.

As a result, the region's energy story is also becoming as much about demand as it has been about supply. Providing electricity to meet rising domestic demand – and to safeguard societal and political stability in many countries in the process – is of utmost importance to avoid further turmoil. In order to increase generation capacity, many countries are aiming for nuclear power in addition to oil, natural gas and renewables. The additional geopolitical motivation for nuclear energy is strong (creating a nuclear weapons capability). But security and safety challenges are insufficiently addressed.

#### A rapidly changing world

The impact of a rapidly changing energy world on the MENA region cannot be overestimated. Balancing the three objectives of energy security, energy equity and environmental sustainability is a challenge for any state. Each country will need to approach it from a unique development level and starting point.

The G7's room for action is rather limited, but it should assist in the development of more effective social welfare systems as an important step towards reducing subsidies and thereby slowing the expansion of energy demand in the region. Parallel to this, so as to diversify energy systems and economies in the MENA region as well as to protect the environment, the G7 should promote a sustainable energy agenda in line with the seventh United Nations Sustainable Development Goal. The G7 can contribute to designing and implementing policies to meet the goals of the Paris Agreement. Where necessary, the G7 can contribute to advancing nuclear safety and security. Finally, the G7 can foster cross-border intra-regional energy cooperation, both in oil and natural gas as well as in renewable energy. **G7**



## G7 Research Group

In the rapidly globalizing world of the 21st century, the Group of Seven major market democracies serves as an effective centre of comprehensive global governance. G7 members – the United States, Japan, Germany, the United Kingdom, France, Italy, Canada and the European Union – contain many of the world's critical capabilities and are committed to democratic values. At its annual summit and through a web of G7-centred institutions at the ministerial, official and multi-stakeholder levels, the G7 does much to meet global challenges, especially in the fields of security, sustainable development and economics.

The G7 Research Group is a global network of scholars, students and professionals in the academic, research, media, business, non-governmental, governmental and intergovernmental communities who follow the work of the G7, the G8 (with Russia) and related institutions. The group's mission is to serve as the world's leading independent source of information, analysis and research on the G7/8. Founded in 1987, it is managed from Trinity College, the Munk School of Global Affairs and the Department of Political Science at the University of Toronto. Professional Advisory Council members, Special Advisors and participating researchers span the world. Through the G7 Research Group, Trinity's John W. Graham Library has become the global repository of G7/8 documents, transcripts, media coverage, interviews, studies, essays, memorabilia and artifacts.

### **The G7 Information Centre at [www.g7.utoronto.ca](http://www.g7.utoronto.ca)**

The online G7 Information Centre ([www.g7.utoronto.ca](http://www.g7.utoronto.ca)) contains the world's most comprehensive and authoritative collection of information and analysis on the G7 and G8. The G7 Research Group assembles, verifies and posts documents from the meetings leading up to and at each summit, the available official documentation of all past summits and ministerial meetings (in several G7/8 languages), scholarly writings and policy analyses, research studies, scholarship information, links to related sites and the "background books" for each summit published by Newsdesk Media. The website contains the G7 Research Group's regular reports on G7/8 members' compliance with their summit commitments, as well as other research reports.

### **Books on the G7, G8 and Related Issues from Routledge**

*The Global Governance of Climate Change*

John Kirton and Ella Kokotsis

*The European Union in the G8*

Marina Larionova, ed.

*Global Financial Crisis*

Paolo Savona, John Kirton and Chiara Oldani, eds.

*Global Energy Governance in a Multipolar World*

Dries Lesage, Thijs Van de Graaf and Kirsten Westphal

*The G8-G20 Relationship in Global Governance*

Marina Larionova and John Kirton, eds.

*G8 against Transnational Organized Crime*

Amandine Scherrer

*The G8 System and the G20*

Peter I. Hajnal

*The New Economic Diplomacy*

Nicholas Bayne and Stephen Woolcock

#### **G7 RESEARCH GROUP**

Munk School of Global Affairs, 1 Devonshire Place, Toronto, Ontario M5S 3K7 Canada

Telephone +1-416-946-8953 • E-mail [g8@utoronto.ca](mailto:g8@utoronto.ca) • Twitter [@g7\\_rg](https://twitter.com/g7_rg) and [@g8rg](https://twitter.com/g8rg)

[www.g7.utoronto.ca](http://www.g7.utoronto.ca)

## KEY TAKEAWAYS

North Korea is now the focus for global security concerns

The United States is unsettling the security order that it created

# Facing up to challenges in East Asia

*As the G7 leaders meet, the ongoing but shifting volatility of the region will be prominent on the collective consciousness, writes **David A Welch***

At the 2016 Ise-Shima Summit, G7 leaders saw China as the main source of instability in East Asia as (so they believed) it “aggressively” and “unilaterally” sought to rewrite rules of order, assert its regional dominance, and turn the strategically and economically vital South China Sea into a Chinese lake. As the Permanent Court of Arbitration prepared to hand down its decision in *Philippines v. China* – widely expected at the time to find in favour of Manila on key points – Beijing railed against its legitimacy and vowed to ignore its ruling. G7 leaders, appealing for calm, urged China to respect international law and refrain from provocative acts.

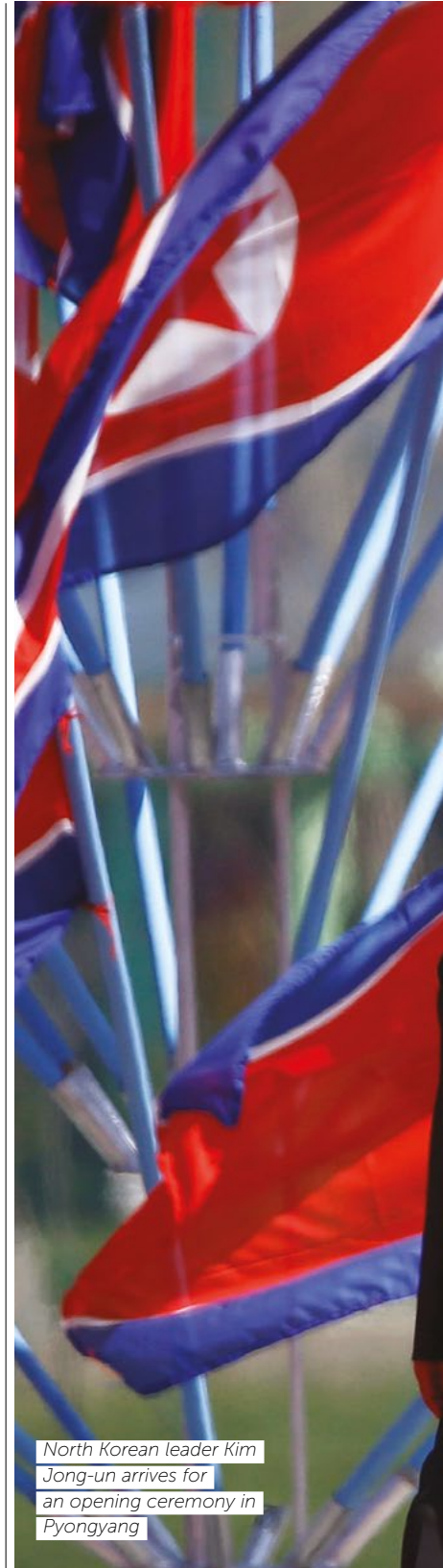
Today it is China that is the beacon of stability, appealing for calm, for order, for respect of international law and for restraint.

### A strategy for North Korea?

North Korea is now the centre of attention. Pyongyang continues its single-minded pursuit of a strategic nuclear capability in defiance of United Nations resolutions and ever-tightening sanctions, and continues to brush aside concerns about its abysmal human rights record. This is not new.

What is new is that in the United States a relatively cautious President Barack Obama has been replaced by an unpredictable President Donald Trump. Declaring the American policy of “strategic patience” over and that “all options are on the table”, the Trump administration has shown signs of willingness to act unilaterally to defang Kim Jong-un. Yet a flurry of mixed messages, blown signals and incoherent tweets has undercut confidence that the Trump administration has either a coherent strategy for dealing with North Korea, or the determination to see it through. US foreign policy has become reactive and impulsive. Allies and adversaries alike are rattled.

There is no doubt that the Korean situation is explosive and that anything could happen at any moment. We now find ourselves in an unprecedented situation: the main source of global and regional uncertainty is itself a G7 member. The United States – the world’s most powerful country – is unsettling the very security order it created and on the basis of which it and others have flourished for decades. We cannot expect a Taormina Summit communiqué to call on Trump to up his game, but this will surely be the →



North Korean leader Kim Jong-un arrives for an opening ceremony in Pyongyang

Territories in the East China Sea continue to be under dispute

Signs show China's foreign policy doves are winning against the hawks



REUTERS/DAMIR SAGOLJ

## David A Welch



Chair of Global Security  
**Centre for International  
Governance Innovation**

*David A Welch is Chair of Global Security for the Centre for International Governance Innovation at the Balsillie School of International Affairs. He is also a Professor of Political Science at the University of Waterloo, and a Senior Fellow at the Centre for International Governance Innovation.*

 @DavidAWelch  
 [www.balsillieschool.ca](http://www.balsillieschool.ca)

**\$5.5BN**

UK spend on nuclear weapons in 2011

2016

at the summit in Ise-Shima, Japan, the G7 leaders saw China as main source of instability



PLANETPIX/ALAMY LIVE NEWS

US Navy ship heading towards South Korea as tensions continue to rise between the US and North Korea

→ dearest unspoken wish of everyone present but Trump himself.

**Instigating change**

The Korean situation must be resolved one way or another. It will not be resolved through diplomacy. It is unrealistic to expect Kim Jong-un to denuclearise voluntarily, no matter what is on offer. He clearly sees nuclear weapons as a vital deterrent, and he has staked his domestic legitimacy on his nuclear prowess. It is similarly unrealistic to expect the United States to allow Kim to master the technology to destroy Seattle from afar. But the cost of forcibly denuclearising North Korea would be a devastating war and a humanitarian catastrophe. The best hope for a peaceful way out is internal change in North Korea. It is time for the international community to start thinking seriously and creatively about novel ways of incentivising sober-minded North Korean elites to take matters into their own hands to bring North Korea in from the cold. In an ideal world, the G7 would surely take a lead role in this. Whether it has the capacity and vision at the moment is a real challenge we face.

Korea is not the only flashpoint of current concern in East Asia, but, for the most part, and perhaps somewhat by surprise, the dangers appear to have receded elsewhere.



REUTERS/2016

**Ocean concerns**

Although China denounced the Philippines arbitration tribunal ruling when it came down last July, Beijing has, in fact, done nothing provocative in its wake, and has even shown signs of compliance. Philippine President Rodrigo Duterte unwittingly smoothed the waters by indulging his anti-Americanism and embracing Xi Jinping, but there is plenty of credit due: China's rival claimants have resisted the temptation to triumph at Beijing's expense, and there are clear signs that China's foreign policy doves are winning internal battles against the hawks.

Cross-strait relations remain a very serious long-term problem, but Trump's backpedalling on his threat to break with the One China principle has at least temporarily calmed the waters.

Next to Korea, perhaps the most dangerous flashpoint is the East China Sea. The Sino-Japanese chess game over the Senkaku/Diaoyu islands has not attracted recent headlines, but the ever-increasing rate of Chinese incursions threatens at some point to result in an incident that would be difficult to contain, given the islands' emotional valence.

As usual, G7 leaders at Taormina will be occupied grappling with the security situation in East Asia. But unlike in past years, it is hard to be optimistic about a coherent, constructive response. **G7**



# Economic, Environmental & Social Stability

## COMPLIANCE SCORES

*The average level at which G7 members have complied with their priority economic, environmental and social stability commitments from the 2016 Ise-Shima Summit*



Macroeconomic policy

+0.73 **87%**

Health

+0.54 **77%**

Climate change

+0.46 **73%**

Trade

+0.27 **64%**

+1 means full compliance, 0 means work in progress or partial compliance, and -1 means no compliance or action antithetical to the commitment.  
Based on a study by the G7 Research Group



ILLUSTRATION: STUDIO NIPPOLDT

INTERVIEW

“  
**Our leaders need  
to act nationally  
and internationally  
to combat  
antimicrobial  
resistance**  
”

Dame Sally Davies

According to Lord O'Neill's review, each year 700,000 people die from drug-resistant infections worldwide

**Dame Sally Davies**, Chief Medical Officer to the UK Government, speaks to Editor **John Kirton** about the global unprecedented threat to life posed by antimicrobial resistance



How serious is the threat of antimicrobial resistance (AMR?)

**A** Antimicrobial drugs, particularly antibiotics, are a cornerstone of the modern world, but their inappropriate use in medicine and agriculture has increased the emergence and spread of resistance. This affects human health, agricultural livelihoods and global food security. We need everyone to realise AMR is a threat in all countries now.

According to Lord O'Neill's review [on AMR], 700,000 people die every year globally from drug-resistant infections, including HIV, tuberculosis and malaria. If we do not take action now, this will get worse. By 2050 an extra 10 million people are likely to die annually because of AMR – more than are dying from cancer today.

This has a significant economic impact. It is estimated to cost the global economy between \$60 and 100 trillion by 2050. The World Bank predicts a catastrophic impact on global poverty, gross domestic product, trade and many other aspects.

Addressing AMR is also integral to achieving the Sustainable Development Goals of the 2030 Agenda.

We lack data to truly understand the extent of the issue – but we cannot ignore it and must act now.

**Q** What is the burden beyond the immediate death figure?

**A** To do this right, we need increased quantity and better quality of data and

we need an international Classification of Disease code for AMR. Right now we do not know who is dying from AMR and where, and families do not know their relatives have been affected by or died of AMR. This is hindering our progress.

**Q** What efforts are being taken to combat AMR?

**A** We have made good progress in recent years. The recognition of a one-health and multisectoral approach to tackle this complex issue has been successful. There was the World Health Organization (WHO) resolution in 2014, and a global action plan agreed in 2015 by all 194 countries and adopted by WHO, the Food and Agriculture Organization (FAO), and the World Organisation for Animal Health (OIE). In September 2016 at the United Nations General Assembly High-Level Meeting, 193 countries agreed an ambitious political declaration and set up an interagency coordination group (IACG) to coordinate and drive action forward. The IACG is required to report back to the General Assembly session running from September 2018 to September 2019.

Meanwhile, the G20, supported by the

@CMO\_England  
www.gov.uk/dh

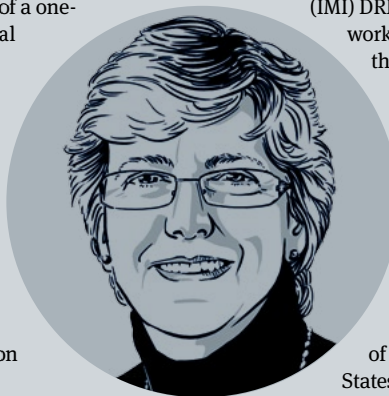
Organisation for Economic Co-operation and Development, is looking at market-based incentive models for new drugs, as the pipeline is dry and industry is not investing sufficiently in research and development (R&D). As the key global economic forum, the G20 is well placed to move the market incentives agenda forward. The World Economic Forum and the Innovative Medicines Initiative (IMI) DRIVE-AB project are working in

this area also.

On research incentives, there are the IMI ND4BB programme and other European Union initiatives, the Biomedical Advanced Research Authority (BARDA) and National Institutes of Health in the United

States, and, globally, the joint programming initiative for AMR,

product development partnerships such as Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator (CARB-X), Global Antibiotic Research & Development Partnership (GARDP), FIND and the Global AMR Innovation Fund, philanthropic organisations such as Wellcome and the Bill & Melinda Gates Foundation, and international organisations such as the World Bank.





JARUN011/ISTOCKPHOTO

A significant amount of R&D and other work is ongoing at national levels on a one-health approach, including human, animals and the environment, and their complex interactions. Thanks to a global commitment, most of the world’s 6.5 billion people live or will soon live in a country with an AMR national action plan.

In addition there is the work of WHO, FAO, OIE and the UN agencies on the one-health agenda. And the UK’s Fleming Fund focuses on building surveillance capacity and capabilities in low- and middle-income countries.

All this work stresses the need for the IACG to coordinate these efforts and report back to the General Assembly in 2018/19.

**Q** How can the leaders help at their Taormina Summit?

**A** The G7 represents the most advanced

economies in the world. Therefore it is essential that G7 members continue to champion AMR to be kept high on the political agenda, especially as leadership changes.

We need our leaders to act – not only at home but also internationally. Because microorganisms do not respect borders, this is a global health security issue.

We need political leaders to implement the global commitments they have already made, building on the momentum gained at the 2016 General Assembly.

G7 members are in a unique position to be able to increase funding for research nationally and internationally that reflects the true scale of the problem and to collaborate on a global basis in order to lead the way and tackle this worldwide issue that is threatening the future of our society’s existence. **G7**

*Antimicrobial susceptibility tests such as these are part of the global fight against AMR*

# Healthcare for the people & societies of tomorrow

Over the next 24 hours, 353,000 babies will be born into a world that's changing faster than ever, and they will be joining a generation of two billion people expected to be born from 2011 to 2025. Intergovernmental meetings such as the G7 and G20 provide the platform to ensure that our next generation, and their children, have greater access to care, grow up to embrace health and wellness and possibly survive diseases we consider impossible to cure today.

## Chronic illnesses

The healthcare issues on the table are manifold: the cost of healthcare will rise as older people make up larger proportions of countries' populations and the prevalence of chronic illnesses increases. In addition to age related health problems, global challenges and viral epidemics are on the rise.

Though costs for the treatment of cardiovascular diseases, cancer and respiratory diseases are expected to plummet, it is anticipated that over 50%

of global healthcare expenditure will be spent treating these three leading causes of death. Moreover, inadequate public health services can cause broader social and economic problems such as low workforce productivity. Meeting these challenges in times such as ours with its ecological, political, social and economic changes and increased uncertainty requires more than just scientific and technological innovation.

It takes increased collaboration between governments, health authorities, academia and industry with patient care at the centre. It also requires innovative

financing models rewarding effectiveness and quality in care, as well as efficiency in budget management; and sustainable research and development models, applying technical innovation and medical advance in cost-effective ways.

## Innovation

As a healthcare company Janssen, the

pharmaceutical division of Johnson & Johnson, is committed to play its part and innovation is the lifeblood of our work. Our founder, Dr Paul Janssen, was always very candid and open about the principles upon which he based his pharmaceutical research activities. He stimulated an environment that encouraged curiosity, entrepreneurship and freedom to operate for his scientists to research what they saw fit. His non-academic approach yielded swift success and resulted in the discovery and production of more than eighty transformative breakthrough medicines, four of which are listed in the WHO's List of Essential Medicines.

Innovation helps to make possible the development of ever-more effective treatments, less invasive procedures with shorter recovery times, and improved patient outcomes. Advances in technology can help speed diagnoses, ensure medicine adherence for improved treatment outcomes, and allow for personalised real-time tracking to support prevention and facilitate positive lifestyle choices for improved health through prevention rather than cure. The development of disease interception techniques is an area of much promise for us and one which could help us all build more resilient healthcare systems. If we are able to delay the development of complications and prevent chronic illnesses, decreasing overall health expenditures.

## Collaboration

More than ever it is clear that we cannot work in isolation if we are to find solutions to the challenges before us. Innovation in healthcare is more than developing medicines that will transform the lives of patients. It's about providing a better quality of service where the patient is at the heart of all decisions and improving access by keeping costs low.

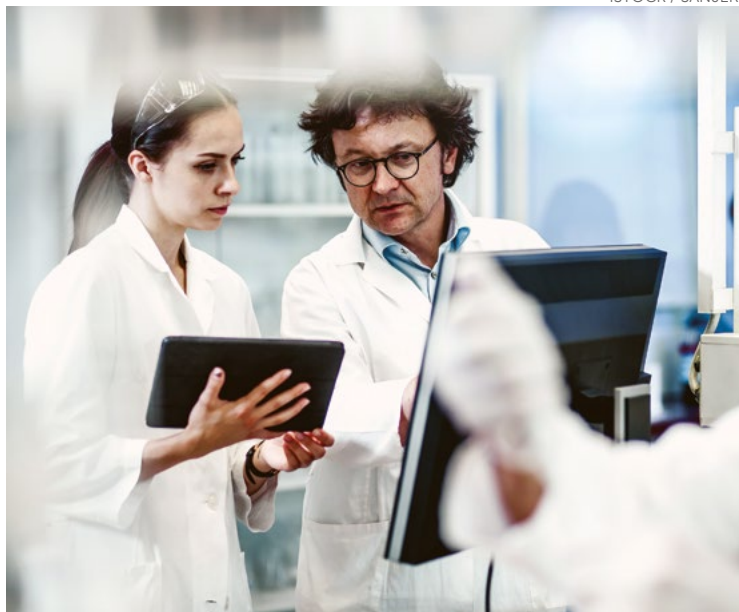
We believe that a good idea can come from anywhere and anyone – and we seek to positively impact human health through innovation and collaboration worldwide. One of the forms this collaboration has taken is our network of Innovation Centers around the world, bringing together a network of academics, scientists, entrepreneurs and business development specialists to source the best



*Innovation helps to make possible the development of ever-more effective treatments*



ISTOCK / SANJERI



possible solutions for unmet medical need.

Other examples of our efforts in innovation include three research platforms that have now been operational for a couple of years: The Janssen Prevention Center to advance disease prevention, The Janssen Disease Interception Accelerator to help pre-empt disease outbreak and the Janssen Human Microbiome Institute to move microbiome research from basic science to the delivery of breakthrough healthcare products. We offer our expertise to the governments and healthcare officials inviting collaboration.

This is where we need to call on governments and regulatory bodies. Biomarkers, patient perspective, real world evidence, disease interception models and diagnostics can guide healthcare delivery, yet regulation in industrialised nations has not allowed the potential to be realised.

We need to more effectively engage with authorities and public and private capital to ensure broad healthcare systems are sustainable for the societies in which they operate. Innovation in governance and systemic innovation are equally important. Occasions such as a meeting of the G20 and G7 may help to exchange perspectives with other players in the healthcare field and find common ground for reshaping healthcare for the people and societies of tomorrow.

**A rewarding environment for risk and creativity**

Recent research by the Deloitte Health Economics Group commissioned by Janssen has shown that innovation becomes more challenging for the biopharmaceutical industry: companies have had to take higher risks for potentially reduced and



**JANE GRIFFITHS**  
Company Group  
Chairman  
EMEA  
**Janssen**



www.janssen.com

decreasing awards. As a company with a track record in delivering breakthrough medicine we continue to advocate for policies that help make innovation models sustainable.

The biopharmaceutical sector operates within a healthcare system that is composed of a wide variety of stakeholders, each with their own immediate concerns: patients with unmet medical needs, researchers and academia with scientific and budgetary needs, hospitals, doctors and paramedics with healthcare delivery challenges, authorities with public health concerns and issues of affordability, insurers and payers with cost-premium balances. More collaboration and a shared holistic view on where society is going with public health can strengthen an environment that fosters innovation.

Such an approach can improve the situation across the whole value chain, from early discovery, IP protection, research development and regulation, through to reimbursement policies. This would align policies and regulations more effectively to meet the healthcare goals of better patient outcomes and optimal positive impact for society.

Another approach that is winning grounds within the pharmaceutical industry is the move away from the transactional delivery of medicines: pharm companies usually develop and produce medicines and are paid following physical delivery. Future payment models could be based on therapeutic and patient outcomes: what is the value of x number of patients that are cured? How much long-term value to society is the eradication or control of a disease?

If our societies are to take healthcare and public health to the next level, we need to look at this together.

## INTERVIEW



# Climate-health security in the Caribbean: an analysis

With a diverse topography and vulnerability to natural and human-made shocks, Editor **John Kirton** discusses how the Caribbean is exploring options to establish climate-health security with **Dr C James Hospedales**

**Q** How do the Caribbean's distinctive features make it vulnerable to climate change?

**A** With 30 diverse countries and territories and more than 40 million people, the Caribbean comprises most of the world's small island developing states (SIDS), places of extraordinary beauty and vulnerability to natural and human-made shocks, none more so than climate change.

With more than 50 million arrivals per year, by air and cruise, it is the most tourism-dependent region in the world.

But the industry is vulnerable to damage by climate change. The Caribbean oceanic basin is trapping warming and increasingly acidic waters, with unprecedented coral reef bleaching and die-offs and impacts on food and economic security. It is experiencing increasingly intense and frequent extreme weather events. Floods from heavy rainfall combined with rising sea levels create immediate emergency health relief needs, damage health centres and hospitals, and

 @CARPHA1  
 carpha.org

increase the risk of epidemics.

Climate-sensitive disease vectors such as *Aedes aegypti* mosquitoes carry dengue and Zika. As temperatures rise, they are increasing in density and their ability to spread disease. Zika shows the intergenerational and cross-border costs this can bring: there is now local transmission of the virus in southern Florida.

The Caribbean's largely middle-income countries are ineligible for many of the development and climate change control funding available only to low-income countries. Yet their capacity to respond is low because of their very small size.

**Q** How have these vulnerabilities inspired the Caribbean to pioneer solutions?

**A** The Caribbean Community Climate Change Centre was established in 2005. The Pan American Health Organization's 'SMART Hospitals' programme to build resilience to the effects of climate change is a good contribution.

The Caribbean Public Health Agency (CARPHA) recently launched the Expert Panel on Climate and Health with Tulane University to analyse, control and prevent the impact on human health and the environment.

The Caribbean Catastrophe Risk Insurance Facility (CCRIF) was created in 2007 to help countries manage the economic risks of increasingly frequent hurricanes. Its work was endorsed by the G7 leaders at their summit in 2015. Discussions are under way to expand the coverage to include associated health effects of extreme weather events.

Greening the CARPHA campus is another initiative to reduce greenhouse gas emissions and reduce energy costs.

**Q** What more could the Caribbean do?

**A** The Caribbean Hotel & Tourism Association could work with regional institutions to rank how tourism facilities perform on integrated environmental and health standards.

Cities of the Caribbean could be encouraged to join the C40 and ask it to address health effects and economic impacts in a broader and more integrated



# Dr C James Hospedales

*Executive Director,  
Caribbean Public Health Agency*



way. The Expert Panel calls for promoting alternative transport such as biking and walking, with links to the tourism industry, with triple bottom line returns.

The Caribbean could create an integrated annual state-of-the-environment-and-health report. This need for a joined-up set of information is a key recommendation of the Caribbean Development Bank on water as a strategic regional resource.

Caribbean institutions could work more closely with the International Seabed Authority and UN Environment's Caribbean Office – both headquartered in Kingston, Jamaica – to increase bidirectional learning about the health effects of climate change.

**Q** How can the G7 leaders at their Taormina Summit best help?

**A** G7 leaders could recognise the unique shared interests of the G7 and the G20 in the Caribbean – given the region's location between North and South America, closely connecting independent countries with territories dependent on the United States, United Kingdom and the Netherlands, and parts of France through travel and trade.

They could work with the region's institutions to implement a G7/G20-CARICOM project to address health, climate and the environment in pursuit of the Sustainable Development Goals.

They could recognise the Caribbean's contributions beyond the CCRIF, and create a global risk insurance facility based on a more comprehensive and integrated concept of climate-associated risks that incorporate their many health effects.

They could invite Caribbean leaders to attend the next G7 summit, in Canada in 2018, as was done for Jamaica and Haiti when Canada last hosted in 2010.

They could institutionalise a regular dialogue between the G7 and Caribbean institutions responsible for health and climate change, starting with regular pre- and post-summit briefings.

They could create an emergency response and surge capacity fund that can be drawn on by regional institutions such as CARPHA to address the health effects of climate change. **G7**

ILLUSTRATION: STUDIO NIPPOLDT

## IN CONVERSATION



# The window of opportunity is closing



*Erik Solheim talks to Editor John Kirton about the urgency for concerted global action to tackle climate change*

**Q** Why is it so important to fully and rapidly implement the Paris Agreement on climate change control and improve it to meet the targets it contains?

**A** The Paris Agreement gives us great cause for optimism because finally we have managed to frame this new consensus and map out a way forward. What we need is immediate action, and that includes countries raising the bar on their commitments. Even if the Paris Agreement is fully implemented, we are still facing a significant emissions gap. The science tells us that we are still heading for a temperature rise of 2.9° to 3.4°C this century. In addition, the door will close on the 1.5°C warming limit unless countries raise their ambitions before 2020. So we have a short window of opportunity.



**Q** How well have the countries that have ratified the agreement been acting in this regard?

**A** We're clearly moving in the right direction, in so far as more major world economies are starting to put emissions into the equation. For example, in China we're seeing the concept of an 'ecological civilisation' take firm root in all aspects of economic planning. In India we see considerable momentum on renewables, especially solar, which are well matched to India's need to lift hundreds of millions out of poverty and ensure long-term energy security. There is also strong momentum in the private sector and in the markets.

For me, the real progress has been how the terms of the debate have shifted away from climate action being viewed as a cost but rather seen as an opportunity – and something that will enable the creation of a more robust, inclusive and productive economy. We're already seeing new data backing this up, for example the numbers that show investment in renewables creates more jobs, better-quality jobs and better-paid jobs than investment in fossil fuels produces. This kind of shift in thinking, underpinned by concrete evidence, will help the Paris Agreement move from being more than just a piece of paper, and take on a life of its own.

**Q** How is the United Nations Environment Programme helping them and the other stakeholders in this task?

**A** Our role is to provide the scientific basis for action, and also clear policy advice and expertise that help member states frame their actions more effectively. For example, we're working on tackling pollution in cities, which is a major driver of climate change but also a major global public health emergency. We're helping

 @ErikSolheim  
 www.unep.org

# Erik Solheim

*Executive Director,  
United Nations Environment Programme*

provide accessible air quality monitoring, as well as work on low-carbon transport initiatives, energy-efficient buildings and better waste management. We're forging partnerships and campaigning not only with governments, but also with the private sector and civil society – which is where the motor for innovation and change will come from.

**Q** What key challenges lie ahead?

**A** We have two key issues: climate change mitigation and climate change adaptation. Mitigation means reducing emissions – and obviously here the big polluters need to take big steps to narrow the emissions gap. On adaptation, it's the poorer countries that will bear the brunt of climate change and who will need support. The cost of adapting to climate change in developing countries could rise to between \$280 and \$500 billion per year by 2050. Although I'm confident that we've gained strong momentum, I'm also well aware that we need to move faster. For that we need more leadership – from governments, companies, entrepreneurs and individuals.

**Q** How can G7 leaders best support the cause?

**A** There is no limit to what they can do to advance this cause. At the very least, we need to see a clear commitment to the Paris Agreement, as well as plans to phase out fossil fuel subsidies so clean technologies can compete on a level playing field. We also need bigger ambitions. Concerted action by G7 members will not only have a major positive impact on climate change, but also help accelerate action across the world. **G7**



ILLUSTRATION: STUDIO NIPPOLDT

WE CREATE **EVERYDAY**  
**ESSENTIALS** TO  
MAKE PEOPLE'S LIVES  
MORE LIVEABLE AND  
INSPIRING



Essential  
ingredients

Essential  
protection

Essential  
color



**AkzoNobel**

# Focused on life's essentials

Populations are getting bigger, and so are our cities. That's why we're dedicated to creating a protected, colorful world where life is improved by what we do.

Whether we're developing innovative new products or services, we're focused on making life easier for our customers while helping to make the world more sustainable.

We're all around you, even when you least expect it. Because at AkzoNobel, we create everyday essentials to make people's lives more liveable and inspiring. Essential ingredients. Essential protection. Essential color.

[essential.akzonobel.com](http://essential.akzonobel.com)

AKZONOBEL

# Meeting the ecological challenges of urbanisation

To mitigate the impact of the frenetic pace of urbanisation that the world is seeing, a tremendous effort in research and development is necessary. Indeed, it is more than ever essential to support improvements in sustainability by using renewable energies whilst decreasing carbon footprint and reducing waste and pollution generation. At AkzoNobel, we believe that we can play a key role in addressing parts of these challenges through innovative solutions.

AkzoNobel is constantly developing better and more sustainable products, delivering essential ingredients, essential protection and essential colour to help create more “Human Cities” around the world for a more liveable and inspiring life.

Our commitment to sustainability is evidenced by our consistent high ranking over the last 10 years on the Dow Jones Sustainability Index (ranked first consecutively for four years) and our Planet Possible programme which is dedicated to constantly finding ways to deliver more with less.

AkzoNobel is a leading paints and coatings company with worldwide recognized brands such as Dulux and Sikkens. Our Global Research, Development and Innovation (RD&I) Centre for Exterior Wall Paints is located in Singapore, a vibrant innovation hub in

Asia. Our research programmes are mainly focusing on sustainability, energy efficient solutions, durability and protection, and of course bringing aesthetic delight to exterior façades.

## **Pollution control and self-cleaning**

According to the World Health Organization, 92 per cent of people across the world breathe in unhealthy



*Our research mainly focuses on sustainability, energy efficiency, durability and aesthetics*





*Pamela Phua, Director, RD&I  
Exterior Wall Paints Expertise & Research Group, Global  
South East South Asia & Middle East  
AkzoNobel Decorative Paints*

air, resulting in millions of deaths every year. Rapidly evolving into a global health crisis, worsening air pollution in the form of thick smog continually engulfs Asia's megacities like Beijing and Delhi as well as Europe's metropolises such as Paris and London.

To support urban communities to combat pollution, AkzoNobel embarked on a programme to deliver next-generation depolluting paint based on the technology of photocatalysis of titanium dioxide. By absorbing sunlight, specifically ultraviolet radiation, photoactive titanium dioxide particles can be activated in the presence of oxygen and moisture to produce free radicals. These highly active radicals are capable of degrading pollutants like nitrogen oxide and sulphur oxide, thereby contributing to the abatement of noxious emissions from motor vehicles and other human activities. However, the radicals can also decompose organic constituents in the paint and consequently impair the paint durability with excessive chalking. This challenging obstacle was overcome by a specially formulated inorganic film having a higher resistance to radical attack.

While cleaning up the air, our photocatalytic paint can also deliver outstanding self-cleaning properties with low dirt pick-up to building façades. This eco-positive benefit derives from both the degradation of the dirt particles by the radicals and the photo-induced super-hydrophilicity effect, where the latter is manifested by a water-loving surface that allows rain to spread readily on the surface, under the dirt, suspend it and wash it away.

#### **Water-repellent coating**

Alternatively, a façade that stays clean can also be delivered via super-hydrophobicity. To this end, AkzoNobel are developing an extremely water-repellent coating with inherently low surface energy, enhanced by multi-scale surface topography. In essence, water beads form and roll off easily, or →

AKZONOBEL



All images are courtesy of AkzoNobel

→ simply do not stick at all, on the coating. Owing to the extreme resistance to rain, mud, stains and dirt, the coated surface will stay dry and clean. This new technology will help urban communities reduce their environmental footprint through significant reduction in the energy and chemical detergents used in building maintenance. This is particularly important for fast-growing cities in emerging markets that are populated with high-rise residential and commercial buildings.

For many cities around the world, for example San Francisco and Paris, it remains a perennial challenge to keep public places clean and the walls away from such abuses as public urination and spitting. In particular, in its fervent pursuit to embrace the issue as a national agenda, the Government of India has embarked on an strong nationwide campaign called “Swachh Bharat Abhiyan” to promote public cleanliness in all of its cities and towns. AkzoNobel’s super-hydrophobic coating is an innovative solution to address such needs. It can protect walls by resisting the adhesion of urine, spit and other stains, thereby deterring public urination and spitting. In line with our Human Cities initiative, our innovation has vast potential to help transform and maintain the cleanliness of urban areas, providing the communities with more liveable neighbourhoods and inspiring surroundings.

**Keeping pace with new construction trends**

Compared to other industries, the buildings and infrastructure sectors has seen much slower increases in productivity and have been slower to adopt new technologies. However, major transformations are now happening.

Prefabrication and modularisation are now playing an increasingly important role in shaping the evolution of the construction industry; as driven by cost, schedule, safety and environmental benefits. Project schedules can be made more productive with shorter site-built construction time and less weather delays, leading to significant labour cost reduction. Work sites’ safety is also improved with fewer weather-related complications and less work at heights. Construction-site waste is also reduced, leading to a lower environmental impact.

One good example is the rising trend in the use of thermal insulation decorative boards in China where such boards deliver both aesthetics and insulation in one solution. Unlike a traditional external thermal insulation composite system (ETICS/EIFS) where every layer is painstakingly applied and put together



*Our innovation has vast potential to help transform and maintain the cleanliness of urban areas*







on site, the coating layers are systematically applied and combined with the insulation layer in a factory environment. This enables a much higher construction efficiency and better quality control than conventional ETICS/EIFS which can be highly subjective to the reliability and quality of workmanship.

The controlled application processes also allows access to a much wider technology platform, some of which would have been inhibitive to use in traditional exterior wall paint. For instance, with UV or high-temperature curing, new technologies can be considered such as UV-cure binders, fluorocarbon polymers and sol-gel processes. Advanced manufacturing processes, with new technologies including 3D printing, will allow more sophisticated coating systems design, opening the way to advanced functionalities such as solar energy harvesting through photovoltaics, or thermoelectric features.

Last, but not least, as the current market is mainly driven by solvent-based solutions, AkzoNobel's objective and motivation is to develop, deliver and promote water-based solutions to contribute to the reduction of VOC emission, while maintaining an equivalent performance.

AkzoNobel's research community and our partners are working hard to extend exterior wall paint functionality and durability to up to 30 years. This will enable a much longer maintenance and repainting cycle, thus reducing building maintenance costs and environmental impact.

**Save energy by keeping buildings cooler**

For cities experiencing seasons with high temperatures, cooling building is a significant source

**AkzoNobel Research**  
Development & Innovation,  
Director,  
Global Exterior  
Wall Paint Expertise  
& Research Group

**AkzoNobel Research**  
Development & Innovation  
Director, South East,  
South Asia and  
Middle East

**Pamela Phua**  
Tel : +65 9027 9663  
E-mail : pamela.phua@akzonobel.com



of energy consumption. The Intergovernmental Panel on Climate Change anticipates that by 2100 the need for electricity to power cooling will have increased to more than 30x the level of year 2000. To decrease this need for cooling, the choice of the paint on the building has an important role as it can absorb more, or less of the solar energy, subsequently transmitting this as heat energy to the building. Traditionally the only way to influence this was to recommend white or light shades which reflect light, notably visible light which contributes to 50 per cent of the total solar energy. AkzoNobel has successfully developed a first generation of paints that offer vivid colours together with the ability to keep the surface cooler. This technology, KeepCool, is based on special pigments that have been selected based on their ability to reflect better in the near infrared region of the solar spectrum, which contributes to 40 per cent of the solar energy. The result is that the surface can be 5 degrees Celsius lower than without this technology, leading to a potential 10 to 15 per cent energy saving for the building.

AkzoNobel is already progressing the second generation of thermal energy management, incorporating objects of a same size order as the wavelengths of light intended to scatter, but with a refractive index very different from its surrounding medium. This allows light diffraction and scattering back part of the incoming energy.

At AkzoNobel we are working every day to propose the most sustainable and performing products to our customers. With their trust and support, we will continue to be a pioneer in the market on sustainability and innovation.

KEY TAKEAWAYS

Worst-case scenarios are becoming real in areas prone to extreme weather

The G7 has placed climate change at the forefront of its policy aims from the outset

# Can the Paris Agreement survive?

*Having signed orders to reverse climate change regulations, will Donald Trump step away from a key G7 objective in Taormina? Ella Kokotsis attempts to answer the question*

Climate change has evolved into one of the most transformational challenges facing the globe today. And as experts, researchers and scientists around the world continue to warn of extreme climactic events, worst-case scenarios are becoming a reality in those regions most susceptible to extreme weather conditions. Not only are these effects likely to have pervasive and irreversible impacts, but their significance will also be felt at every level – from marine ecosystems and food security to fresh water availability and human health.

## Reversing climate change policy?

Why then, at a time when the world’s climate has moved well beyond the patterns of natural variability and into an era of dangerous and irreversible consequences, are the global commons now facing the possibility of a political stall or – worse yet – a reversal in their global climate policy?

Part of the answer lies in the rise to power of a US president who dismisses the effects of anthropogenic global warming, describing climate change as a “hoax”, an apocalyptic way of thinking about environmentalists and the scientific community. Donald Trump’s signing of an executive order on 28 March 2017 to undo climate change regulations mandated under Barack Obama brought into question US support for any international agreement to fight global warming. As politics and

science are now on this dangerous collision course, speculation looms on what the G7 can realistically deliver when Trump faces his fellow summit leaders for the first time in Sicily.

## G7 leadership on climate governance

Although the G7’s process of governing global climate change has been both challenging and constraining, the summit process is credited with leading climate governance in ways other international environmental institutions have largely failed to do. Since its first summit in 1975, the G7 has placed climate protection at the forefront of its policy objectives, alongside economic, health, energy and security goals. During this process, the G7 has reached consensus on the importance of stabilising emissions through technological innovation, energy efficiency, conservation and investment. Moreover, it has consistently delivered on its commitments to move these policy objectives forward. The critical element in making this process work over the years has been the degree of consensus achieved by the leaders in both reaching and delivering on their climate and energy goals.

One of the critical elements in this complex equation is how far the G7 can go if the United States pulls out of the Paris Agreement. The road from Copenhagen to Paris set the groundwork for a new path in addressing climate change, one that does not rely on hard targets and timetables but rather on a reporting mechanism



Scientists and science advocates gathered in Copley Square, Boston, during the Stand Up for Science rally

\$100bn

The amount committed by G7 leaders in flows to the developing world by 2020

How far the G7 can go if the US pulls out of the Paris Agreement needs thought

US coal companies, however, will not wish to lose seats at climate talks table



CHUCK NACKE/ALAMY LIVE NEWS

that depends on nationally determined contributions. But the agreement is as much about money as it is about cutting greenhouse gas emissions. G7 leaders have committed \$100 billion a year, by 2020, in flows to the developing world. A cut in the US contribution, coupled with Trump's pro-fossil fuel rhetoric, will only serve to create an unwillingness to cut emissions in those countries where energy is desperately needed and already scarce.

**Key pillars**

Energy and climate change have been identified as key pillars in the Italian G7 presidency's Foundation of Renewed Trust, with a crucial target area being the implementation of the Paris Agreement. And although early reports suggested that Trump would not sign off on a number

of foreign policy measures, including climate change, some signs of hope have surfaced in the weeks prior to Taormina. Large US coal companies recognise that, with their future so tightly tied to foreign markets, a withdrawal from the Paris Agreement would risk losing a critical seat at the climate negotiation table, thereby relinquishing control to their European counterparts. Thus remaining in the Paris negotiations and encouraging a more balanced, reasonable approach may be the best choice the US administration has. And with White House Press Secretary Sean Spicer noting that a final decision on whether the United States stays in the deal is expected to be made by the time the G7 leaders meet in Taormina, pressure will undoubtedly be on all G7 members to push the US in the right direction. **G7**

Ella Kokotsis



Director of Accountability  
**G7 and G20  
Research Groups**

*Ella Kokotsis is the Director of Accountability for the G7 and G20 Research Groups. She has consulted with the Canadian and Russian governments, and is co-author of The Global Governance of Climate Change: G7, G20 and UN Leadership.*

[@g7\\_rg](https://twitter.com/g7_rg)  
[www.g7.utoronto.ca](http://www.g7.utoronto.ca)

## KEY TAKEAWAYS

More than 65 million people are forcibly displaced worldwide

Low- and middle-income countries host 90% of those forced to flee

# Combating migrants' hunger

Countries with the highest rates of food insecurity also have the highest rates of outward migration. In Taormina, G7 members should explore ways to invest in food security programmes, writes David Beasley



**W**e didn't know what lay ahead. All we knew was that we needed to escape."

This admission, by a Syrian woman who fled to Jordan with her children after a bomb destroyed her house and killed her husband, sums up the despair and desperation felt by many refugees.

Her words are contained in a report recently published by the World Food Programme (WFP) examining the relationship between migration, conflict and food insecurity.

### Strategies to put refugees first

As world leaders gather in Taormina for the annual G7 summit, strategies to help refugees and internally displaced people rebuild their shattered lives should be at the top of the agenda.

The number of people forcibly displaced due to conflict and persecution has reached unprecedented levels in the post-war period – more than 65 million people, according to the Office of the United Nations High Commissioner for Refugees (UNHCR). A further 25 million are forced to leave their homes each year because of natural disasters.

Despite the headlines declaring a "migration crisis" in Europe, the responsibility for providing refugees with shelter overwhelmingly falls on low- and middle-income countries. In reality, they

host nine in ten of those who are forced to flee their communities.

As resources are stretched and systems struggle to cope, the result is often chronic food insecurity and the denial of basic rights as children are deprived of an education.

The Taormina Summit is an opportunity for G7 members to show leadership and commit to addressing the root causes of mass migration. WFP's research has identified food insecurity as one of them.

Our analysis showed that countries with the highest rates of food insecurity also have the highest rates of outward migration. Along with other critical factors such as armed conflict, it is one of the main reasons people set out on dangerous and uncertain journeys in search of safety and a better life. So how do we help people who have lost everything regain a sense of hope?

Longer term, there need to be concerted international efforts to resolve conflicts and create the stability that will allow refugees to return home and rebuild their lives.

In the short term, G7 members need to commit the resources necessary to deliver adequate social support programmes,

39%

of the world's displaced people are being hosted in the Middle East and North Africa

Long-term refugees should be helped to become self-reliant in host countries

Beating the despair that spurs migration would help people stay closer to home



UN PHOTO/MARTINE PERRET

Residents of a UN Mission at Pibor, South Sudan, share a laugh with a UN police officer

including food assistance, to displaced people as close to home as possible.

### Sharing the cost of caring

WFP's research confirmed what all of us instinctively know — most people would rather be in places where the language, religion and culture are familiar, and where family and friends are nearby.

Most displaced people end their journeys as soon as they reach a place of safety. But rich countries have a responsibility to low- and middle-income countries to share the costs of caring for refugees.

Without adequate financial support, relations between refugees and host communities can soon become strained as competition for food and other resources increases, and local infrastructure and services struggle to cope. The result is often rising social tension and serious harm to community relations. The G7 members must help relieve the burden.

Alongside humanitarian support, we also need to assist the growing numbers of long-term refugees who have little hope of returning home to rebuild their livelihoods.

### Helping refugees build self-reliance

At WFP, all our experience tells us the best way of ending hunger and improving food security is to help people to support themselves. That's why we are collaborating with UNHCR on a joint programme to help refugees increase their self-reliance and food security. If displaced people have the right to work, own land and grow their own food they have an opportunity to live with dignity in the future.

As the G7 members gather in Taormina for their discussions, they should explore ways to invest in food security programmes which enable the victims of hunger, war and poverty to rebuild their livelihoods as close to home as possible. This approach will help refugees and displaced people take back control of their lives and give them a sense of hope, counteracting the despair which spurs so many people to embark on perilous journeys to uncertain destinations.

The G7 summit is a real opportunity to make progress on this shared agenda, but we all need to work together to help people in need. We owe it to the widow in Jordan and the millions like her around the globe. **G7**

David Beasley



Executive Director  
**United Nations World Food Programme**

*David Beasley was appointed Executive Director of the United Nations World Food Programme in March 2017. In a public service career that spans over four decades, he has worked across political, religious and ethnic lines to champion economic development, humanitarian assistance, education, and intercultural and interfaith cooperation for the most vulnerable people across the globe. He served as Governor of the US state of South Carolina from 1995 to 1999. He was first elected to public office at the age of 21 as a member of the South Carolina House of Representatives.*

[@WFPChief](https://twitter.com/WFPChief)  
[wfp.org](http://wfp.org)

## KEY TAKEAWAYS

The US administration has departed from classic trade negotiating style

G7 leaders need to avoid policies that cause micro-protectionism

### Gary Clyde Hufbauer



Reginald Jones  
Senior Fellow

**Peterson Institute for  
International Economics**

*Gary Clyde Hufbauer has been Reginald Jones Senior Fellow at the Peterson Institute for International Economics since 1992. Formerly the Maurice Greenberg Chair and Director of Studies at the Council on Foreign Relations, the Marcus Wallenberg Professor of International Finance Diplomacy and Deputy Director of the International Law Institute at Georgetown University, he served as Deputy Assistant Secretary for International Trade and Investment Policy of the US Treasury and Director of the International Tax Staff at the Treasury.*

 @PIIE  
 [www.piie.com](http://www.piie.com)



US President Donald Trump at a bill-signing ceremony in the Roosevelt Room of the White House, 27 March 2017

Countries with modest budget deficits should commit to expansive fiscal policy

Policy sacrifices by surplus countries are preferable to downward trade spirals



MEDIAPUNCH INC./ALAMY LIVE NEWS

# Aiming to protect free trade

*At Taormina, G7 leaders need to play to their economies' strengths to prevent increased protectionism prompting a global downturn, explains Gary Clyde Hufbauer*

In a huge departure from the post-Second World War style of conducting trade negotiations, US President Donald Trump has declared clear objectives for US trade policy.

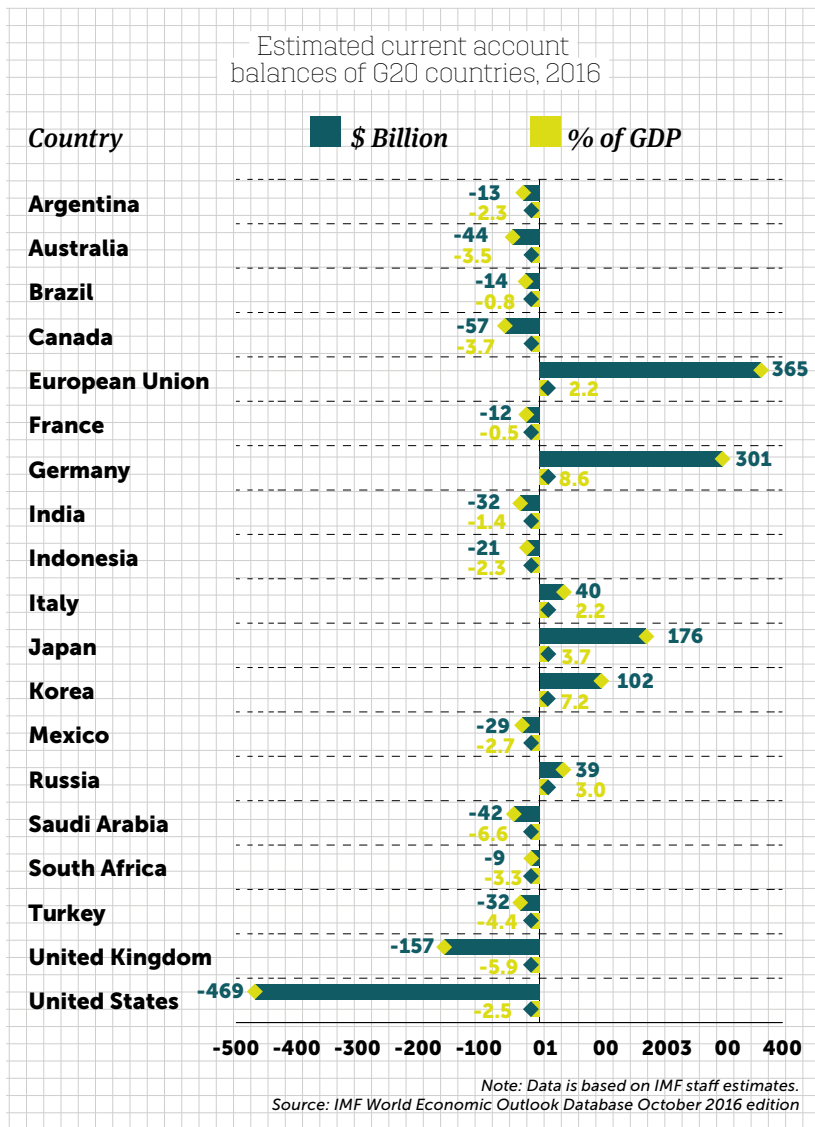
This agenda contains the risk of trade wars that could seriously disrupt the global economy. More likely, if less cataclysmic, is the spread of 'micro protection' – the sort of measures that all G20 members have indulged in since the great recession. The first task of the assembled G7 leaders is to contain those risks. The second and equally important task is to agree on a course of action that expands world trade.

## Outlining future responses

Some G7 leaders may be tempted to lecture Trump on macroeconomic verities – fiscal balances, private savings and investment, and exchange rates. The lectures will fall on deaf ears: in response, the President can rattle off anecdotes of high tariffs and taxes that obstruct US exports, bilateral trade imbalances that cost US jobs and past episodes of currency manipulation. That debate would waste valuable time.

The best way to avert a trade war and ward off micro protection is for each G7 member to lay out, in a factual way, the responses that each would take in the event its exports face new barriers in foreign markets. To be sure, the Trump administration believes that existing barriers, not new barriers, are the provocation faced by the United States. The US annually publishes long lists of such barriers in its *National Trade Estimates Report on Foreign Trade Barriers*. But at the Taormina Summit on 26–27 May, the United States will →

\$301bn  
Germany's estimated current account balance, 2016



## PRESIDENT TRUMP'S TRADE OBJECTIVES

President Trump has declared clear objectives for US trade policy:

US trade deficits, now running at \$500 billion annually, must be reduced.

Expanded US exports are the preferred way to curtail deficits.

But if necessary, US imports will be curbed by unilateral US barriers.

Bilateral negotiations with trade surplus partners will commence shortly.

Trade surplus partners are expected to make asymmetric concessions.

be the country closest to the threshold of imposing new import restrictions, if not against Germany or the European Union, then against Mexico or China. Knowing the reaction of other G7 members may stimulate fresh thinking in Washington.

### Trade expansion is wise policy

Beyond averting an outright trade war or the spread of micro protection, the G7 leaders should chart a course of trade expansion. Current account surplus countries must take the lead, but the actions asked of them should differ depending on their circumstances. Surplus countries with ample 'fiscal space' – meaning good debt ratings and modest budget deficits – should commit to expansive fiscal policies. Surplus countries

with less ample fiscal space should commit to lowering their trade barriers unilaterally.

These prescriptions are not novel. At the Bretton Woods Conference in 1944, John Maynard Keynes tried to persuade the United States to accept the burdens of its status as the foremost post-war surplus state. Keynes failed in the realm of monetary policy, but a few years later the United States launched the Marshall Plan, with a similar effect through the capital account.

### Four countries to lead world trade

The table above identifies four countries that should take leadership today in expanding world trade. The obligation falls on Germany, China, Japan and Korea – in that order. Only Germany and Japan are G7

members, but their commitments can chart the path for China and Korea.

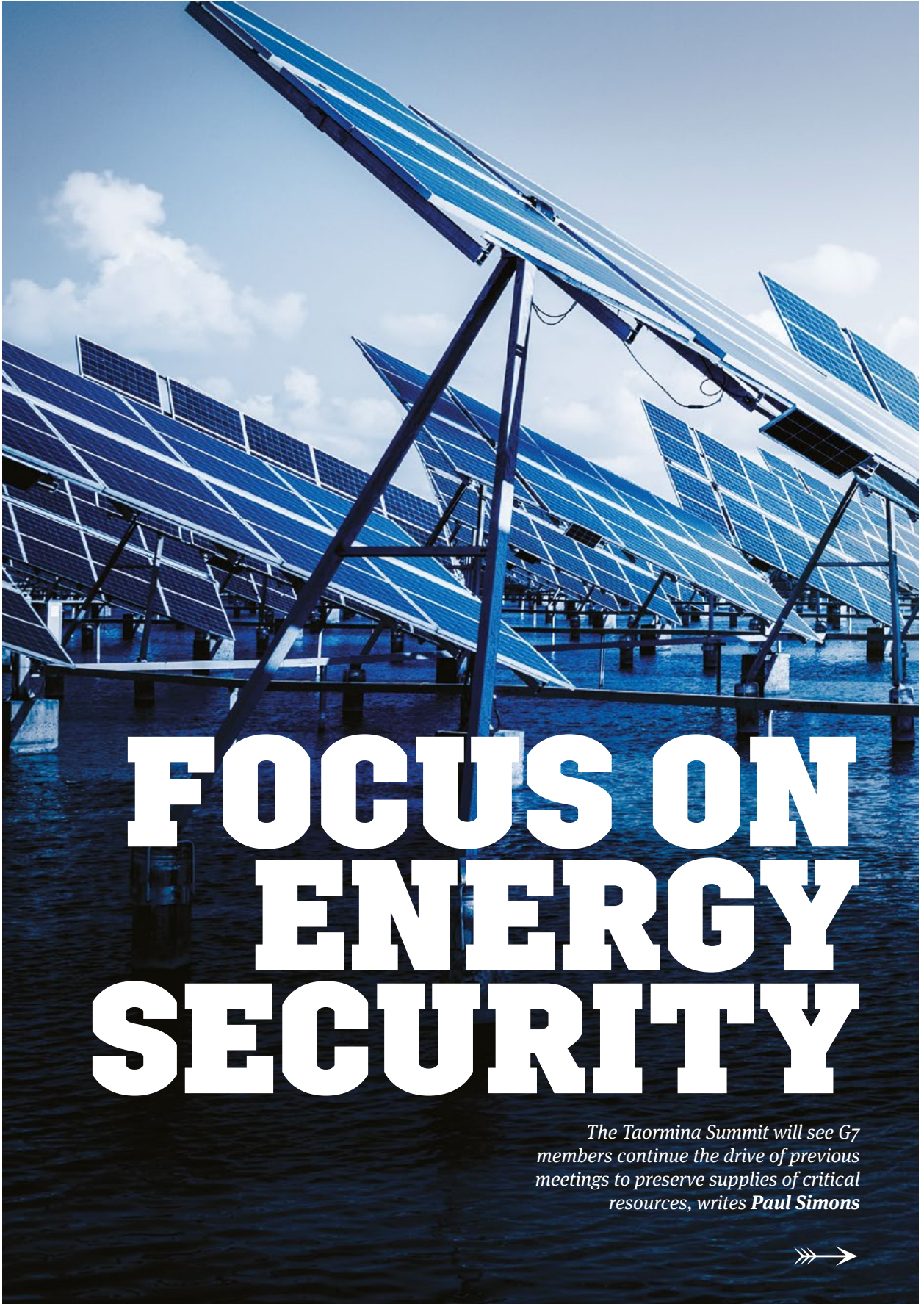
Germany has the most ample fiscal space of any country, but it has only slow and indirect influence over the EU's external trade barriers. Germany should cut taxes and raise public spending – initiatives that will be appreciated by the German people as well as the world economy.

Japan is constrained in the fiscal dimension, owing to the very high level of public debt relative to gross domestic product. However, Japan has excessively high barriers to imports of agriculture and services. These should be slashed – to the advantage of the Japanese people and the world economy.

Following the lead of Germany and Japan, China and Korea can both undertake a combination of fiscal stimulus and trade liberalisation. Or they can appreciate their exchange rates.

These prescriptions are both difficult and unprecedented. But critical times call for extreme measures. Globalisation is unpopular, world trade has stalled and the collective policy outlook is dismal. Policy sacrifices by surplus countries are far preferable to a downward spiral of trade contraction. **G7**





# FOCUS ON ENERGY SECURITY

*The Taormina Summit will see G7 members continue the drive of previous meetings to preserve supplies of critical resources, writes **Paul Simons***



## KEY TAKEAWAYS

Energy-efficiency investment must increase to drive the energy transition

The next frontier will be reducing the oil dependency of the transport sector

The new formation of the G7 in 2014 allowed a deepening and renewed focus on the topic of energy security. In the past three years, strong consensus has emerged among like-minded members, notably with regard to ensuring open, transparent, liquid and secure global markets and that energy should not be used as a threat to security. Over three G7 presidencies, energy security and resilience have been placed at the heart of the summit's work, starting with the 2014 Rome Initiative for Energy Security, followed by the 2015 Hamburg Initiative for Sustainable Energy Security and the 2016 Kitakyushu Initiative on Energy Security for Global Growth.

### Energy security and efficiency

Throughout this time, the International Energy Agency (IEA) has been invited to provide advice and analysis to core G7 energy security mandates including natural gas security, electricity security and energy efficiency.

On natural gas security, the IEA assisted the European Commission during the EU stress tests, assessing how international markets for liquid natural gas (LNG) will support gas security in Europe. What started as ad hoc advice has developed into the IEA's annual Global Gas Security Review, which provides analysis on increasingly globalising and complex LNG markets.

Similarly, on energy efficiency, the exchange of experience has allowed for continuous learning on how to integrate energy efficiency policies into infrastructure planning, rules and financing in order to optimise the future design of networks and supply-side investment choices.

Finally, with regard to electricity security,



the integration of variable renewable energy is an area where G7 members have strongly benefited from discussion and collaboration. The IEA Grid Integration of Variable Renewables (GIVAR) programme, and collaboration with the International Renewable Energy Agency (IRENA), has supported this exchange. At the same time, power sector resilience, including security, has been a priority over the past years. The IEA will continue to support discussions on this important topic among the G7 members, and will present a report in October 2017 with detailed analysis on the interaction between digitalisation and the energy sector.

All these 'roads' have led back to Rome, where the G7 energy ministers met in April 2017. This ministerial meeting confirmed that the G7 remains the main forum for energy ministers to discuss energy security.

Despite some differences in approach, there are significant benefits and opportunities to be found in continuing this strong collaboration on energy security and energy and development under the Sustainable Development Goals. The key

question for G7 leaders will be how the energy transition can be managed in a way that protects today's energy sector jobs and creates new job opportunities. Canada's G7 presidency in 2018 will be crucial in this context. G7 leaders in 2017 should endorse a strong energy investment agenda for clean energy technology, supporting both economic growth and the energy transition.

### The way forward

First, energy efficiency investment will have to increase to become the primary driver of the energy transition. The IEA ministerial meeting on energy efficiency on 29 June 2017 and the G20 Energy Efficiency Forum on 2 May 2017 in Hamburg provided opportunities to deepen the collaboration between IEA members in the G7 and partner countries in the G20. Responding to the request from G7 energy ministers, IEA delivered the report Market-based Instruments for Energy Efficiency: Policy Choice and Design to the Rome meeting in 2017.

Second, renewable energy investment



ISTOCK/ MIMADECO

Wind turbines in Oiz Eolic Park, Basque Country, Spain.

*G7 leaders should endorse a strong energy investment agenda for clean energy technology*

remains a strong driver of economic transformation of our energy systems across the G7.

Third, the next frontier will be reducing the oil dependency of the transport sector. This has the potential to increase collective energy security for many years and support the energy transition. The IEA has modelled transport sector technology outlooks for decades, with results published in Energy Technology Perspectives and World Energy Outlook, providing solid insights into the future of transport, data and analysis on a range of technologies, be it electric vehicles, natural gas, biofuels or hydrogen. Most of the technology drivers for the energy transition, notably in end-use sectors, will require technology breakthroughs. Innovation cannot wait, and commitments under Mission Innovation, which aims to reinvigorate and accelerate global clean energy innovation with the objective to make clean energy widely affordable, are crucial.

Lastly, G7 leaders have an opportunity to link the energy development and energy transition agendas, notably by investing in energy access and developing renewable investment in Africa. These are themes that the IEA has been working on for decades and we welcome the Africa 2030 agenda of the Italian presidency.

Just as the G7's commitment to energy security has grown stronger over the past three years, the energy security work of the IEA has expanded. The IEA's World Energy Investment report was first published in 2016, providing insights into the dynamics of energy investment and drivers. And recently the IEA became the official host of the Clean Energy Ministerial secretariat. With its modernised membership, the IEA will be able to contribute continuously to the strengthening of the G7 energy security action and provide a bridge between G20 and G7. We look forward to supporting Canada's G7 in 2018. **G7**

2018

Canada will host the G7, and creating new jobs in today's energy sector will be of great importance



Paul Simons

Deputy Executive Director  
**International Energy Agency**

*Paul Simons became Deputy Executive Director of the International Energy Agency in July 2015, helping provide leadership and strategic direction, including advancing its global engagement strategy by strengthening cooperation with non-member countries. Prior to joining the IEA, he was a senior United States diplomat with a background in energy and economic policy. He was Executive Secretary of the Inter American Drug Abuse Control Commission and served as US Ambassador to Chile and as Deputy Assistant Secretary of State for Energy and Sanctions.*

[@IEA](#)  
[www.iea.org](http://www.iea.org)

## KEY TAKEAWAYS

Average labour productivity in OECD members has nearly halved since 2007

Public belief in governments across the OECD was just 42% in 2016

Angel  
Gurría



Secretary General  
**Organisation for  
Economic Co-operation  
and Development**

*Angel Gurría has been Secretary General of the Organisation for Economic Co-operation and Development (OECD) since 2006, having been reappointed in 2010. He served as Mexico's Minister of Foreign Affairs from 1994 to 1998 and Minister of Finance and Public Credit from 1998 to 2000. Gurría has participated in various international organisations, including the Population Council and the Center for Global Development. He chaired the International Task Force on Financing Water for All and was a member of the United Nations Secretary General's Advisory Board on Water and Sanitation.*

@OECD  
 [www.oecd.org](http://www.oecd.org)

# All on board

*The OECD is ready to support the G7 policy response to boost inclusive growth and restore trust, writes **Angel Gurría***

**G**7 members are currently facing a vicious circle of low growth, rising and/or high inequality, and eroding trust in public institutions. These three interrelated trends constitute a formidable challenge confronting policymakers in our countries.

Today, growth continues well below pre-crisis levels, despite a modest acceleration in recent months. This low-growth trap is, at least partly, the result of a significant slowdown in productivity since the 2008 crisis. Average labour productivity growth in the members of the Organisation for Economic Co-operation and Development (OECD) has nearly halved since 2007. Perhaps more worrying, productivity dynamics are having an impact on household income and inequality. Indeed, OECD research shows that productivity gaps between firms have widened as 'frontier' firms have continued to make gains but laggard firms have underperformed. This divergence has translated into a widening gap in wages and, thus, in rising inequality.

## Growth of inequality

Inequality trends are particularly worrisome. No matter how you look at it, inequality has widened over the last two decades across OECD and G7 members, whether you measure flows of income, accumulated stocks of wealth or overall living standards. The richest 10 per cent of households in the OECD possess half of total wealth, while the bottom 40 per cent own just three per cent. The top one

per cent holds 19 per cent of total wealth. And inequalities are transmitted from one generation to the next: children whose parents did not complete secondary school in G7 members have only a 15 per cent chance of making it to university, compared to a 60 per cent chance for peers with at least one college-educated parent.

Albeit complex to disentangle and varying from country to country, the drivers are very similar across G7 and OECD members: technological change, a broken productivity 'diffusion machine', the impact of certain aspects of globalisation and less effective redistribution mechanisms.

## Losing trust in governments

High inequality is a major source of concern, not just because of its negative effect on social cohesion but also because of its potential impact on productivity and growth. High levels of inequality also become a burden for public finances, through increased pressure on social spending. Moreover, this vicious circle has had a significant toll on public trust, which in turn makes much-needed reforms more difficult: public belief in governments across the OECD was just 42 per cent last year.

What can the G7 members, both collectively and individually, do to reverse these trends? At the OECD, we believe that a strong and coordinated policy response is needed. At the request of the Italian G7 presidency, we delivered a comprehensive analysis of the trends and drivers of inequalities in G7 members with detailed policy recommendations to finance ministers



*Inequality has widened over the last two decades across the OECD and G7 members*



and central bank governors at their Bari meeting. Two main priorities stand out.

**Re-evaluating fiscal policy**

First, G7 governments should look at the ‘bread and butter’ of fiscal policy, tax and spending, from an inclusive growth perspective. What could this mean in practice, particularly in a context of limited fiscal space? It means broadening tax bases, strengthening the progressivity of the overall tax system in countries where it has become low and/or diminished significantly and, crucially, stepping up international tax cooperation efforts against tax evasion and avoidance. It also means stepping up infrastructure investment (including social infrastructure), and introducing greater efficiency in public spending by prioritising key interventions in education, health and social services and better targeting the people and places most in need.

**Better balance of structural policies**

Second, finance ministers would need to address fiscal challenges through better balanced ‘packages’ of structural policies that achieve, simultaneously, both productivity growth and inclusiveness. These policy packages should promote business dynamism, competition and technology diffusion; boost participation and employment rates while reducing labour market insecurity and segmentation; mitigate displacement costs related to reform implementation, technological change and globalisation; and, last but not least, reduce

WHITE HOUSE PHOTO / ALAMY STOCK



*World leaders at the G7 summit walk out to the roof garden of the Shima Kanko Hotel. May 26, 2016, in Shima, Japan*

the gender gap and promote the integration of women in economic activities.

Policy responses need to be country-specific, as there is no single best model or policy mix that works for all G7 members. But there are clearly common elements from which we can all learn. And, of course, the national benefits of countries successfully implementing domestic policy actions will have an impact on not just their own economies and citizens, but the international collective as well.

That is why the outcome of the G7 finance ministers and central bank governors’ meeting in Bari, with the adoption of the G7 Policy Agenda on Inclusive Growth and Inequalities, shows a promising way forward. At the OECD we are ready to support the G7 in boosting growth while making sure that no one is left behind. **G7**

1%

**of households in the OECD member countries hold 19% of its total wealth**

IN CONVERSATION



# The US has the capacity for significantly increasing imports, which benefits the global economy



Editor **John Kirton** talks to **Robert Fauver** on coordinating US, European and Japanese growth strategies

**Q** What is the state of the global and G7 economies?

**A** The global economy and the G7 economies are both better in 2017 than they were last year. Global growth will be moderately higher this year, between a half and three-quarters per cent more than last year. I would bet that the G7 will be at least a full percentage point higher than last year.

**Q** What are the global and G7 economies' prospects for strong, inclusive growth?

**A** Japan will muddle along between one to one and a half per cent, continuing an extremely modest, slow recovery that affects essentially everyone except the very low end looking for new jobs. There will be some real wage growth and low inflation. Canada is doing better than most. It should

have a solid performance that includes everyone. In the United States, if it can move tax reform forward, so expectations become solid instead of tenuous as they are now, then its growth performance will be significantly better, and could hit 3 per cent. The odds of increased employment in the middle class are rising. Wage growth is still slow but if employment tightens, middle-class wage growth will pick up after a 15-year stagnation. The United Kingdom has got over the Brexit shock very quickly and is on a path to have a solid, decent year. Germany is the question mark, because confidence factors there are very weak from consumers and investors, although growth and numbers look good. I blame the social unrest taking place in northern Europe, Scandinavia and Germany.

**Q** How much does the world need more stimulus from the United States?

**A** The US has not been a world growth stimulant for the past eight years as it has muddled through the slowest recovery in modern history. It now has the opportunity for stronger domestic growth, which the world has always benefited from. If the rest of the world sees US leadership, confidence strengthens, and this tends to increase domestic growth. Growth in the US import market will benefit Japan and Europe. The US is Europe's largest single market other than itself. When it does well, Europe does better. US President Donald Trump has enacted several wide-ranging executive orders to remove some of the serious impediments to growth and economic flexibility that came in over the past eight years. We will see steady progress on deregulation. I am more dubious that tax reform will be delivered by year end. But if the bills are being debated by Congress, it will be psychologically beneficial.

**Q** Are G7 exchange and interest rates on the proper path?

**A** Yes, exchange rates are on the proper path. The dollar is strong, but I see nothing wrong with a strong dollar in helping the rest improve their exports. The US has the capacity for significantly increasing imports, which benefits the global economy. All interest rates have been too low for too long. We need to stop the artificial injection of

# Robert Fauver

*Former adviser to US presidents  
on economic affairs*

money and liquidity, which has not proven successful since the financial crisis, and return to classic monetary policy with real interest rates that are positive, with a yield curve with an upward slope.

**Q** What are the major weak spots and risks to the global economy?

**A** One risky spot is Brexit. Much will depend on how difficult the Europeans are in formulating the exit costs. My bet is a more bumpy transition than a smooth one. If the EU bureaucrats are left alone, it will be a very penalty-oriented approach. Also, people misunderstand Trump's view of international trade: he is not for protectionism qua protectionism. He is for old-fashioned 'fair' trade. We risk ending up with trade conflicts by misunderstanding each other. So the trade outlook is looming over confidence investment factors.

**Q** If you had to pick an instrument with the most growth-stimulating pay-off, what would it be?

**A** Domestic structural reform is a major problem in all the G7 countries. There's a bigger bang for that buck than any other single thing.

It has to be simultaneous. The US is already focused on deregulation, which I hope targets those regulations that interfere most with innovation with new construction and new business operations. Europe has labour problems, with an inflexible high-cost labour market that does not respond well to sectoral demands. Japan has more internal barriers to flexibility. Its regulatory frameworks stifle new product innovation, new testing and competition.

**Q** How can the G7 leaders boost strong, sustainable growth that benefits more people?

**A** G7 leaders need to return to a communiqué with specific, country-by-country commitments to coordinated policy change so each country lists what it will focus on to benefit itself and the global economy. In the 1970s the communiqués had specific commitments on real policies by individual countries that together formed a package that was self-reinforcing. **G7**



ILLUSTRATION: STUDIO NIPPOLDT

## KEY TAKEAWAYS

There are 65 million refugees in the world today

About a third of migrants in the world are between 15 and 14 years old

Gilbert F.  
Houngbo



President  
**International Fund for  
Agricultural Development**

*Gilbert F. Houngbo is the President of the International Fund for Agricultural Development, which is dedicated to eradicating rural poverty in developing countries. Born and raised in rural Togo, Houngbo has spent more than 30 years working to improve the lives of some of the world's most vulnerable people. He previously served as Deputy Director-General of the International Labour Organization, where he led field operations in more than 100 countries. From 2008 to 2012, he was Prime Minister of the Republic of Togo. He has also held numerous leadership positions at the United Nations Development Programme.*

 @IFAD  
 [www.ifad.org](http://www.ifad.org)

# Tackling the root causes of migration

*With millions of people displaced worldwide, concrete aid to mitigate rural poverty could quell the impetus to global mass movement, explains Gilbert F Houngbo*

In 2016, there were almost 250 million international migrant workers in the world, and an additional 750 million people were migrants within their own countries. Any phenomenon that moves a billion people ought also to motivate us to inquire why – yet too often the debate is about the consequences for the places where migrants arrive, and not about the causes that led them there.

### Recognising the problem

Political concern focuses on the 65 million forced displaced people and more than 21 million refugees in the world today. However, the ‘problem’ with migration is not the people, but our recognition, understanding and analysis of the driving forces, and our collective willingness to address them.

Migration has a major rural dimension. Some 40 per cent of international remittances – the money migrants send home – goes to rural areas, where more than 75 per cent of the world’s poor and hungry people live. Most of them depend largely on agriculture for their livelihoods, but face many barriers in improving their operations,

or even simply feeding themselves.

Poor rural people contend with a variety of challenges, including lack of access to markets, finance, services and technology, which inhibits their productivity and limits their options – and sometimes induces them to migrate in search of better opportunities, either in their own countries or abroad.

Natural resource degradation and climate change can also have a severe impact on rural livelihoods and can spark conflicts over land and water that are further destabilising and fuel rural migration. Degradation and desertification affect around one-third of the land used for agriculture, and about 1.5 billion people worldwide. Access to land is an obstacle, particularly for women and young people.

### Quality of life

About a third of all international migrants are aged between 15 and 34. In many African countries, more than half of rural households report having at least one migrant. This is not surprising given the livelihood challenges they face. Huge rural-urban disparities in essential infrastructure and services such as roads, water and

DPA PICTURE ALLIANCE / ALAMY STOCK PHOTO



The quality of life in rural areas is generally much lower than urban life

Migration is a symptom of poverty, inequality, conflict, injustice and neglect



A refugee who got rescued from the Mediterranean Sea off the coast of Libya

electricity make quality of life in rural areas generally significantly lower than in urban centres. This makes migration to towns and cities an apparently attractive option, despite the slums and unemployment that too often await new arrivals.

Thus, the links between rural poverty, migration and other factors are complex. Our solutions must be flexible, holistic and inclusive. Although home to the majority of the world's poor people, small farms across the developing world are key to global food security and employment. In Africa for example, agriculture generates 68 per cent of rural household income, and small farms are responsible for up to 80 per cent of agricultural production. Agriculture in Africa employs between 65 per cent and 75 per cent of the workforce.

### Access to finance

In a global survey conducted in 2014, more than 70 per cent of young farmers said that access to finance was the main obstacle they faced. This is a barrier not only for the young: an estimated two billion people worldwide have no access to regulated financial services and 73 per cent of poor



*Agriculture in Africa employs between 65 per cent and 75 per cent of the workforce*



people are unbanked. In addition, farmers and operators of rural small and medium-sized enterprises are often seen as too risky to lend to, closing off the possibility of investing, improving and expanding.

In early 2017, the International Fund for Agricultural Development (IFAD) and the Italian government established the Smallholder Agriculture Finance and Investment Network (SAFIN) to mobilise finance and channel investment to small farmers and rural enterprises. The multi-stakeholder network provides a forum aiming for greater coherence among development partners and a platform on which new initiatives for inclusive rural finance can be forged. Young rural entrepreneurs are a particular target group.

SAFIN is the result of a longstanding, close and collaborative partnership between IFAD and Italy. It will play an important role in aligning rural investment efforts with the 2030 Agenda for Sustainable Development. During the Italian presidency of the G7 in 2017, IFAD is particularly supporting the G7's renewed focus on food and nutrition security as one target under the overarching theme of "Building the Foundations of Renewed Trust". It was in 2009 that Italy's G7 presidency drew international attention to the importance of investing in agriculture and this year's meeting will continue to build on those foundations, as recent G7 presidencies have done. The time is now ripe for the G7 to turn its attention to putting concrete financial and action commitments on the table. IFAD applauds the intention of the Italian presidency to put forward the Taormina Initiative, addressing the linkages between distress migration, food insecurity and rural underdevelopment.

### Migration as a symptom

Migration is a symptom of broader causes, and distress migration in particular is a symptom of poverty, inequality, conflict, injustice, neglect and marginalisation. Inclusive innovative investment in rural areas is not a panacea, but it addresses these issues at the root, rather than blindly trying to suppress or contain the symptoms.

At IFAD, we see every day that when policies, technologies and investments are directed towards the social, economic and financial inclusion of smallholders and other rural residents, the results are real – greater productivity, higher incomes and better food security and nutrition lead to stability in rural areas and a hopeful future. These conditions make migration a choice rather than a necessity. **G7**

## KEY TAKEAWAYS

G7 countries produce nearly one-third of the world's economic output

Women's full and equal economic participation is vital to achieving the SDGs

# LEAVE NO WOMAN OR GIRL BEHIND

*United Nations initiatives are working in conjunction with the G7's commitment to achieving gender equality, writes **Phumzile Mlambo-Ngcuka***

Each year, the G7's declarations provide invaluable guiding principles with specific commitments to action both internationally and in its own members. As those countries produce nearly one-third of the world's economic output, last year's guiding principles for the capacity building of women and girls towards sustainable, inclusive and equitable economic growth were particularly important. Women's full and equal economic participation, rights and leadership are vital to achieving the Sustainable Development Goals (SDGs) and building a resilient and inclusive global economy in which prosperity is shared and no one is left behind.

Women's economic empowerment was the theme of this year's 61st session of the Commission on the Status of Women and the primary focus of the United Nations Secretary General's High-Level Panel on Women's Economic Empowerment, which has

just concluded its work. Comprising leaders from governments, private sector, trade unions, commercial banks, civil society and multilateral organisations, the panel discussed practical but transformative ways to make economies work better for women.

It identified seven drivers that are critical to unlocking women's economic potential: tackling adverse norms and promoting positive role models; ensuring legal protections and reforming discriminatory laws and regulations; recognising, reducing and redistributing unpaid work and care; building digital, financial and property assets; changing corporate culture and practice, improving public sector practices in employment and procurement; and strengthening visibility, collective voice and representation. It also called for action to strengthen gender-responsive macroeconomic policies to boost inclusive short and long-term economic growth.



The W7 focuses on helping the G7 realise its commitments to gender equality

Women's economic empowerment was the theme of the 61st session of the Commission on the Status of Women



WANG YING/XINHUA/ALAMY LIVE NEWS

Kristen Visbal's "Fearless Girl" on Wall Street, New York City stands for gender diversity

**90%** of future jobs will depend on digital skills

**1/4** of today's technological workforce are women

RAY EVANS / ALAMY STOCK PHOTO



→ Now we must ensure that these recommendations are taken forward at the highest levels.

### Women's Seven mission

The Women's Seven (W7) is dedicated to helping the G7 realise its commitments to gender equality and women's empowerment. It builds with urgency on important commitments the G7 has already made, such as endorsing the High-Level Panel's work and promoting alliances with the private sector to adopt and implement the Women's Empowerment Principles (WEPs).

The W7 underlined the imperative of achieving equal pay, measuring and valuing unpaid care while reducing its drudgery through technology, and ending violence against women. It affirmed that fostering women's economic empowerment should start with investing in girls' health and education, with special emphasis on sexual and reproductive health rights and entry into careers in science, technology, engineering and maths (STEM). The W7 also agreed on the importance of effective monitoring systems to measure G7 members' progress against their commitments, particularly regarding targets to reduce labour-force participation gaps and increase investment in technical and vocational education and training (TVET).

### High-Level Panel recommendations

Key aspects of the panel's drivers and recommendations align with recent G7 commitments: increasing the number of women and girls equipped with TVET by one-third in developing countries by 2030; supporting women in STEM fields; promoting the WEPs; ensuring women's equal rights, participation and opportunities for leadership; and decreasing the gender-



*Women's collective voice in decisions that affect their lives is key in public and private sectors*



gap in labour-force participation rates by 25 per cent by 2025.

**Education**

About 90 per cent of future jobs will depend on digital skills. Yet women today represent just one-quarter of the technology workforce. The G7 will not be able to accomplish its goals without addressing this imbalance and boosting the pipeline that propels girls and women out of poverty into fulfilling and valued careers. This means increasing TVET and opportunities in the science, technology, engineering, arts and maths fields.

**Promoting WEPS**

Achieving the panel's driver for changing business culture and practice requires partnership with key allies in the private sector. The G7 explicitly endorsed the seven WEP guidelines developed by UN Women and the UN Global Compact to boost women's economic participation and empowerment. We want to see these commitments act as a powerful vehicle for private sector engagement in G7 members and beyond, with clear and replicable results.

**Enhancing women's representation**

Women's collective voice in decisions that affect their lives is key in both the public and private sectors, including trade unions, political bodies and on senior management boards. Achieving this requires gender parity at all levels, which can be effectively promoted by G7 members, including through temporary special measures and timeframes for reaching gender parity in all institutions well ahead of 2030.

**Women's employment**

When more women work, economies grow. Women's access to decent jobs is a function of the amount of time they can dedicate to paid employment, which is deeply intertwined with the availability of childcare and access to social protection. The World Bank recently found that countries with mandated paternity leave laws have a higher proportion of women in the workforce by up to 6.8 per cent. Women's entrepreneurship and the promotion of women-owned businesses should also be a cornerstone of any strategy to promote women's workforce participation.

**Reaching the most marginalised**

We need systemic change, through policies and legal reforms that remove structural barriers, challenge discriminatory norms, ensure adequate social protection, expand access to crucial infrastructure, and facilitate the organisation and collective voice and representation of women. To ensure that we reach the most marginalised women, we must address multiple and overlapping discriminations, and promote not only women's rights, but also workers' rights, reproductive and sexual health and rights, rights for migrants and refugees, and LGBTQI rights.

We are counting on G7 members to act decisively on commitments that place women's rights, participation and leadership at their core and to follow through on their implementation, including using high-quality data to monitor accountability. Together we can ensure that economies are made more fair, just and sustainable, in the G7 and around the world. **G7**



Phumzile Mlambo-  
Ngcuka



Executive Director  
**UN Women**

*Phumzile Mlambo-Ngcuka has been United Nations Undersecretary General and Executive Director of UN Women since 2013. From 2005 to 2008, she served as Deputy President of South Africa. Prior to that she served as South Africa's Minister of Minerals and Energy and Deputy Minister in the Department of Trade and Industry. She is the founder of the Umlambo Foundation, which supports leadership and education.*

@phumzileunwomen  
 [www.unwomen.org](http://www.unwomen.org)

## KEY TAKEAWAYS

Five million people took part in events relating to the Women's March

Gender equality will be a top priority at the G7 Taormina Summit

Julia Kulik



Director of Research  
**G7 Research Group**

Based at the Munk School of Global Affairs at Trinity College in the University of Toronto, Julia Kulik is also Director of Research for the G20 Research Group, the BRICS Research Group and the Global Health Diplomacy Program. She has written on G7/8, G20 and BRICS performance, particularly on the issues of gender equality and regional security. Kulik leads the groups' work on gender, women's health, regional security and summit performance.

[@juliafkulik](https://twitter.com/juliafkulik)  
[www.g7.utoronto.ca](http://www.g7.utoronto.ca)



## Move to the long term

For G7 progress on gender equality to have a lasting impact, the issue should be woven into all of the mainstream summit agenda, writes Julia Kulik

The importance of achieving global gender equality has received more sustained attention at international summits in the last few years than ever before. There has been a steady increase in attention at the G7 summits since 2015, complemented by support from other institutions such as the G20 and the United Nations. It has also been a key year of public support for gender equality beginning in January with the Women's March on Washington and its companion marches around the world, which brought together more than five million people. Civil society representatives met at the Women's Seven (W7) on 7–8 April in

Rome to formulate recommendations on women's economic empowerment ahead of the G7 leaders' summit in Taormina.

Yet many gender gaps still exist, both in G7 members and in the rest of the world. And there are fears that governments that are perceived to have regressive views on the rights and roles of women could lead to these gaps widening. It is therefore more important than ever that gender equality remains a priority when G7 leaders meet each year.

### Monitoring compliance

On 8 March 2017, International Women's Day, Italy's G7 presidency announced that gender equality would be a top

The G20 and UN are also giving prominence to gender issues

In 2013 the G7 committed to prevent sexual violence in conflict



REUTERS/BRIAN SNYDER

The Women's March on Washington in January 2017

priority at its Taormina Summit in May. Italy announced its intention to mainstream gender throughout the agenda. This follows a pattern set by G7 presidencies since 2015 and signals that gender equality may have a permanent place on the G7 agenda. As attention to the issue has increased, the G7 has been successful in meeting its gender-related commitments, which span different areas including health, education, and labour and employment. On the commitments made by the leaders since 1975 that have been assessed for compliance by the G7 Research Group, G7 members comply on average at 76%. Members that tend to be among the highest compliers are Canada at 97%, the United States at 85% and the United Kingdom at 84%.

**A whole-communiqué approach**

Now that gender equality seems to be on the G7 agenda to stay, it is imperative that it moves away from a single-issue focus with different initiatives each year to an approach that weaves gender throughout



its entire communiqué, recognising gender aspects of the economy, climate change, global health and all other issues in which women are disproportionately affected. It is also important that G7 members make their progress on implementing previous years' commitments publicly available.

The G7 has made some valuable contributions on gender, for example its 2013 commitments to prevent sexual violence in conflict. However, in recent years it has paid little attention to that issue at the leaders' level, which calls into question how much has been achieved. Moreover, to report progress accurately, G7 members should work with international organisations to produce gender-disaggregated data in a timely manner.

Canada is in an excellent position to lead on advancing gender equality, as a government that has consistently announced its commitment to do so domestically. As Canada will assume the G7 presidency in 2018, it can help ensure that momentum on the issue is sustained for the next two years. **G7**

**The ten most in-demand jobs in 2017  
didn't exist in 2007.**

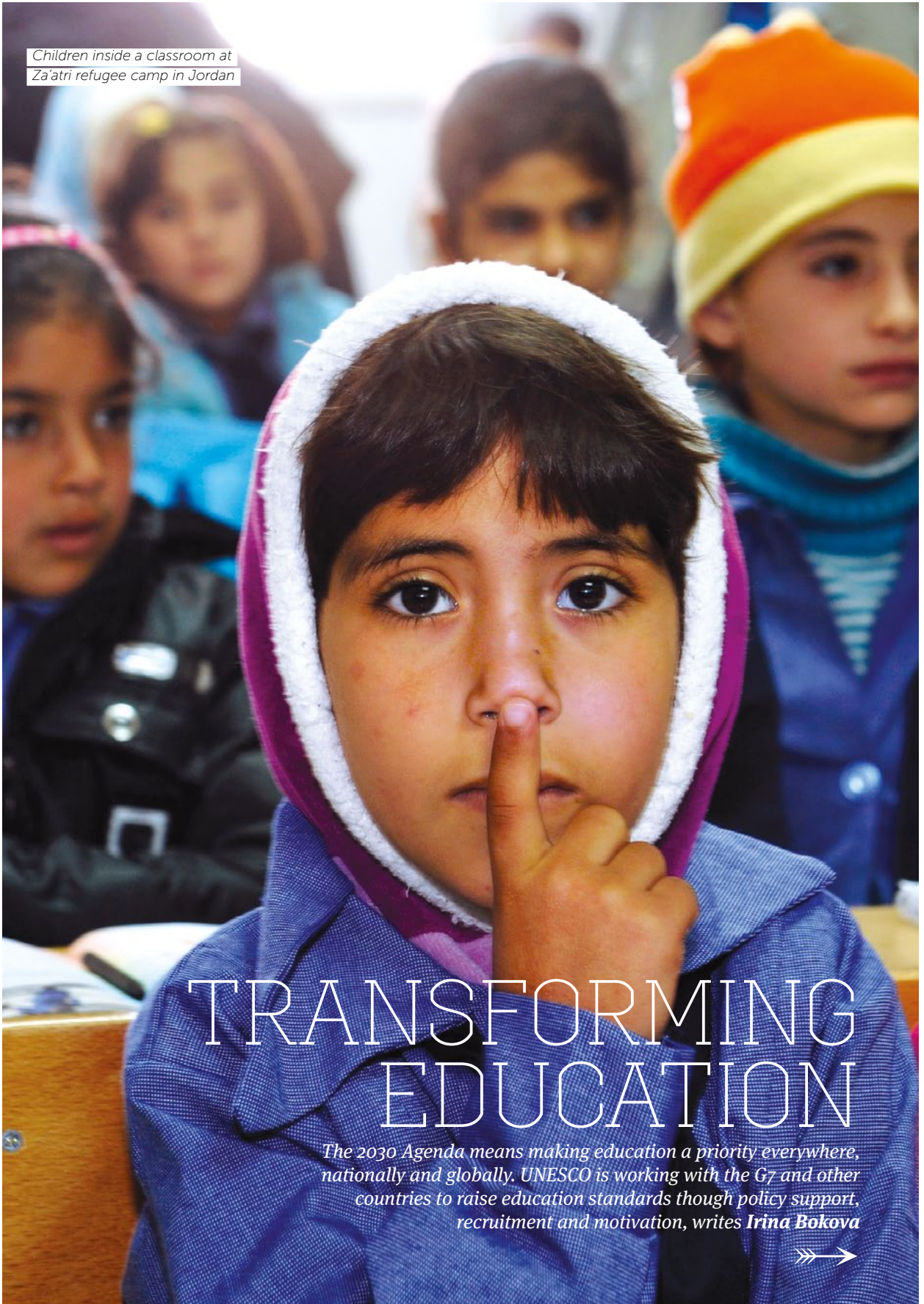
**IULM, LEARNING THE FUTURE.**



The future presents a world of opportunities for those who know how to deal with change, who can combine knowledge and know-how, who are capable of critical thinking and who possess emotional intelligence. Come and discover the world of tomorrow!



Children inside a classroom at Za'atri refugee camp in Jordan



# TRANSFORMING EDUCATION

*The 2030 Agenda means making education a priority everywhere, nationally and globally. UNESCO is working with the G7 and other countries to raise education standards through policy support, recruitment and motivation, writes **Irina Bokova***



## KEY TAKEAWAYS

Two-thirds of the world's 758 million illiterate adults are women

By 2020, there could be 40 million too few workers with tertiary education

# Irina Bokova



UNESCO/MICHEL RAMASSARD

Director General  
**UNESCO**

*Irina Bokova has been the Director General of UNESCO since 15 November 2009. She was elected twice as Member of Parliament in Bulgaria and she served as the government's first Secretary of European integration. She was Minister for Foreign Affairs a.i., as well as Bulgaria's Ambassador to France, Monaco and UNESCO and Personal Representative of the President of the Republic of Bulgaria to the Organisation Internationale de la Francophonie.*

@IrinaBokova  
 [www.unesco.org](http://www.unesco.org)

In 2015, the world charted a new course for the next 15 years in the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change. These agreements are the most ambitious, universal and comprehensive the world has ever defined, at a time when global challenges – from poverty and deepening inequalities to violent extremism – appear daunting.

At the heart of this new agenda stands education – as a basic human right, as a transformational force for poverty eradication, as an engine for sustainability, and as a force for dialogue and peace. This is embodied in Sustainable Development Goal 4, to “ensure inclusive and quality education and promote lifelong learning opportunities for all”.

### Education is the best investment

UNESCO's *Global Education Monitoring Report: Partnering for Prosperity* is clear – we must transform not only economies but also education systems, to encourage critical and complex thinking, initiatives and new competences through lifelong learning. Educating a child is the best investment a



*We must do everything to ensure the digital revolution is a development revolution for all*



263M  
Children, adolescents and youth are out of school

ISTOCK/HIGHWAYSTARZ-PHOTOGRAPHY



ISTOCK/BARTOSZ HADYNYAK



society can make, to join the dots between poverty and prosperity, to fight exclusion, to advance dialogue and solidarity.

The stakes are high: 263 million children, adolescents and youth are out of school – and most of them are girls. Just one per cent of poor rural young women in low-income countries complete secondary school and two-thirds of the 758 million illiterate adults in the world are women. Children in conflict-affected countries are especially vulnerable, with 50 per cent of refugees having no access to secondary education. Sustainable development requires highly skilled workers with specific training – yet, by 2020, the world could have 40 million too few workers with tertiary education relative to demand.

### Responding to rapid global change

The need for new skills extends to all spheres of life, and in all countries, including in the G7. Rapid global change calls for flexibility and the ability to learn throughout life. From early childhood through adulthood, education needs to nurture a range of cognitive, socio-emotional and behavioural skills that enable learners to take informed decisions and assume active roles locally, nationally, regionally and even globally.

Learning must reinforce an individual's resilience, inculcate an ability to appreciate diversity and change, and build media and information literacy. This approach to education is what UNESCO calls Global Citizenship Education.

### Harnessing technology

With more than six billion people having access to a connected mobile device, mobile technology is changing how we live and learn. We must support these trends to shape them for the benefit of all women and men – to reinforce education systems, to bolster knowledge dissemination, to widen information access, to advance quality and effective learning, and to ensure more effective service provision.

This is the goal of the Broadband Commission for Sustainable Development, co-chaired by President Paul Kagame of Rwanda and Carlos Slim, and co-vice-chaired by the International Telecommunication Union and UNESCO. The same objective underpins all UNESCO's work to advance mobile learning – including through our annual global flagship Mobile Learning Week, led this year with the United Nations High Commission for Refugees, to reinforce education in emergency and crisis situations.

### Bridging the digital divide

We must do everything to ensure the digital revolution is a development revolution for everyone. This calls for targeted policies – including G7 by members – to bridge digital divides, to widen access by marginalised groups, to empower girls and women especially, and to ensure everyone has the right skills to make the most of change.

All this calls for a new focus on recruiting, supporting and training teachers across the board. UNESCO works with the G7 and other countries, including through the International Task Force on Teachers to raise education standards – through policy support on recruitment, training, motivation, social dialogue and accountability of the teaching profession. In Africa, for instance, UNESCO is working to improve the technology infrastructure and skills of teacher educators in teacher training institutions in 10 African low- and lower middle-income countries.

The 2030 Agenda is universal – no one can be left behind. This means making education a priority everywhere, nationally and globally, in developing and developed countries. It means also harnessing the full power of new technologies for the benefit of everyone. **G7**

# The future is always a discovery

The Scuola Normale Superiore in Pisa and Florence is one of the most prestigious universities in Italy and highly ranked internationally. Its students are chosen on merit alone through extremely selective entrance exams. The courses are multicultural and flexible, structured to provide students with the critical methods of analysis they will need to face life's challenges with adaptability and originality. Nobel Prize winners Giosuè Carducci, Enrico Fermi and Carlo Rubbia, and Italian Presidents Giovanni Gronchi and Carlo Azeglio Ciampi are only a few of the notable alumni who exemplify the soundness of this method.

Today's challenge is the future: the Scuola Normale strives to be a place where the community envisages how the world will be in twenty or thirty years, which ethical values should be cultivated, which synergies investigated to create new forms of knowledge. The Normale is an extended laboratory in which technologies, sciences and humanities meet, collide and integrate, constantly creating new energies. Some of the most important formation and research activities are sketched in the following:

## **Computational Chemistry, High Performance Computing and Virtual Reality**

These are managed by the SMART team, whose research activity is related to the Theoretical and Computational Chemistry and aimed at the development, validation and application of methodologies based on quantum mechanics and statistical thermodynamics for the study of complex molecular systems. Our models and the corresponding computational approaches are available to the scientific community, both in the academia and industry. SMART hosts the Avogadro data centre for High Performance Computing (HPC) and big data storage and the DreamsLab, a laboratory that uses immersive virtual reality systems to display different types of data. This allows better use and understanding of the data, from scientific and educational points of view.

## **Condensed Matter Physics**

The research activity in this field deals with



*The Scuola Normale Superiore in Pisa and Florence is one of the most prestigious universities in Italy*



nanostructures, optics, molecular biophysics, and quantum information. Particular emphasis is placed on the synthesis, fabrication and study of nanostructured systems and devices. Electronic and optical properties of these systems are studied in an effort to identify useful applications in the context of (opto)electronics, energy storage problems, quantum information processing technology.

## **Cosmology**

The research focuses on the early stages of cosmic galaxy formation, the so-called Cosmic Dark Ages, which took place during the first billion years after the Big Bang. We also explore the nature of dark matter by studying how it regulates cosmic structure formation and the associated gravitational lensing effect predicted by Einstein, which distorts and magnifies the images of very distant galaxies. Our research implements the key physical processes with data obtained from the most powerful telescopes.

## **Mathematics**

The current research activities in this sector cover harmonic analysis, infinite dimension analysis, variation calculus and geometric measure theory, algebraic geometry, dynamic systems, diophantine geometry, complex analysis and analytic geometry, financial systemic risk, high frequency finance and market microstructure.

## **Neurosciences**

This research program focuses on a number of themes in the brain studies: neural development and stem cell biology, synaptic and neural plasticity, aging, neurodegeneration, exploiting cutting edge experimental approaches. Current research activities lead naturally to therapeutic and diagnostic applications relevant for the neurological, neurodegenerative and psychiatric pathologies that hit the human brain. Great attention is placed on the development of new experimental strategies.

## **Classics**

Classics focuses on the study of ancient literatures, Greek and Latin texts, literary and epigraphic sources, Greek and Roman history, archaeology of the Mediterranean world, Graeco-Roman art





history, ancient philosophy and paleography. The chronological span includes cultures and societies from the first millennium BCE to Late Antiquity and beyond, embracing the transmission and reception of these notions through the centuries, from medieval to contemporary periods.

#### Contemporary Art

Fields of interest concern the study of nineteenth and twentieth century sculpture, especially in relation to its correlation with the sculptural tradition from ancient times to the eighteenth century; the study of the relations between Italian and international art in the twentieth century; materials concerning expositions in private Italian galleries in the 1960s and '70s and the virtual restoration of these expositions; the study of the history of book illustration; the study of painting techniques.

#### Contemporary History

The research is focussed on the history of educational institutions, the history of the welfare state, and the history of the relations between religions and society. Rigorous attention is paid to the transnational dimension of the topics dealt with, accompanied by an intense effort to integrate new digital instruments with the analysis of the sources. We strongly believe that the complex problems of contemporary society

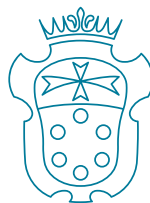
can be analysed best on the basis of a proper knowledge of the past.

#### Philosophy

The research activities are focused on the history of philosophy, the history and philosophy of logic, and the theoretical philosophy. In the field of history of philosophy particular emphasis is devoted to ethical, religious and political issues and to authors such as Avicenna, Bruno, Montaigne, Marx, Croce, Gentile. Concerning history and philosophy of logic, specific attention is devoted to Leibniz, to the establishment of modern science, to the relationship between logic and mathematics. Theoretical philosophy covers broad issues in contemporary philosophical topics with special attention to the principal streams of twentieth century Continental philosophy and to Italian Theory also in connection with the international context.

#### Social Sciences

The Institute of Humanities and Social Sciences is hosted in Palazzo Strozzi in Florence. Research activities address fundamental issues in our societies, including transformations in democracy, social movements, civil society, political violence, new media, public policies and market institutions at local, national, European and global levels.



SCUOLA  
NORMALE  
SUPERIORE

[www.sns.it](http://www.sns.it)

## KEY TAKEAWAYS

Youth unemployment was first discussed at the 1977 G7 summit



The New Global Partnership for Development was launched in 1996

Caroline  
Bracht



Senior Researcher  
**G7 and G20  
Research Groups**

*Caroline Bracht is a Senior Researcher with the G7 and G8 Research Group, G20 Research Group, BRICS Research Group and Global Health Diplomacy Program, based at the Munk School of Global Affairs in Trinity College at the University of Toronto. She has researched and written on G7/8, G20 and BRICS compliance, specifically on development, climate change and energy commitments.*

 @CarolineBracht  
 [www.g7.utoronto.ca](http://www.g7.utoronto.ca)

# Placing teaching at the core

*Education governance has received varying degrees of prominence at G7 summits since 1977, writes **Caroline Bracht***

Since the early 20th century, an increasing number of actors have contributed to the global governance of education. Initially, it proved difficult to build unanimous political support and adequate funding to establish an international institution dedicated to education, an issue considered to be a domestic concern that did not require global attention. However, since then various organisations, both formal and informal, have increasingly contributed to the governance of education at the international level.

## History of involvement

The G7's involvement began in 1977, two years after its first summit. Leaders were concerned with youth unemployment at home. It took six years until education returned to the agenda, again as a solution to the persistent problem of unemployment within G7 members. Only in 1996 did it arise as an international component, with the introduction of the New Global Partnership for Development. It focused on ensuring that developing countries benefited from globalisation, with education considered a major component.

The 1999 Cologne Summit moved the issue forward with the publication of the *Cologne Charter Aims and Ambitions for Lifelong Learning*. Leaders perceived a shift

to a “learning society” and considered education and skills to be indispensable to achieving success in knowledge-based economies. Lifelong learning was key.

## Education ministers meet

G8 education ministers met for the first time on 1–4 April 2000, along with representatives from the Organisation for Economic Co-operation and Development and the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The G8's specific support for education in developing countries began at the 2000 Okinawa Summit with support for the Education for All Initiative (EFA) and the pledge that no developing country government committed to achieving EFA would struggle from a lack of resources.

From 2000 to 2005, support continued for EFA and the World Bank's Fast Track Initiative. The Russian-hosted 2006 St Petersburg Summit was the most progressive in recent years. It issued the second stand-alone G7/8 document titled *Education for Innovative Societies in the 21st Century*. The ‘knowledge triangle’ of research, education and innovation formed the pillars of this document. Dialogue on EFA continued and UNESCO's Education for Sustainable Development was introduced.

Most recently, at the 2016 G7 summit in Ise-Shima, host Japan did not address education as an individual issue but did



G8 education ministers met for the first time in April 2000

The 2006 St Petersburg Summit was the most progressive on education



MEGAPRESS / ALAMY STOCK PHOTO

Boys with a tablet in Laos

1977  
The first year of G7 involvement in education governance



*The G7 has taken a solid step forward by focusing its annual accountability report solely on education*



publish an accountability report that cited the group’s strong commitment to working with international partners to achieve EFA. The report said: “The G7’s strong determination to support the education sector is also reflected in the collaboration such as through the Global Partnership for Education ... The G7 will ensure ‘quality basic education’ for every child, especially for the poorest and the most vulnerable population in fragile and conflict-affected areas.”

**Evolution of the agenda**

Although the education agenda has been sparse at times, it has expanded and evolved. It shifted away from direct and simple statements on education as the remedy to high unemployment towards a more nuanced discussion, taking note of technological advancements and the importance of education for all and the importance of life-long learning.

Nonetheless, education has not received the attention or funding needed to get the job done. This year, with Italy hosting the Taormina Summit, the G7 has already taken a solid step forward by focusing its annual accountability report solely on education. This accountability mechanism will draw attention to the current gap in funding and programming, and, one hopes, will spur the G7 leaders into action. **G7**

# Teachers and their unions mobilise for refugees and migrants



## Promoting quality education for all children

Education unions are developing a wide range of initiatives and actions to support teachers and schools working with refugee and migrant children in order to offer them the best education and integration opportunities.







## Defending the rights of refugees and migrants

Inside and outside schools, education personnel and trade unions are mobilising around the world to promote the rights of migrants and refugees and their access to quality public education.



## Supporting teachers in their classroom

Teachers and their organisations join forces around the world to identify, develop and share teaching resources and classroom material that foster inclusion, celebrate diversity and advance global citizenship.

*Scan this QR code to find out more about these stories*



[education4refugees.com](http://education4refugees.com) [#ed4refugees](https://twitter.com/ed4refugees)



Education International  
Internationale de l'Éducation  
Internacional de la educación



BRICS RESEARCH GROUP

MUNK  
SCHOOL  
OF  
GLOBAL  
AFFAIRS



UNIVERSITY OF  
TORONTO



**RANEPA**  
THE RUSSIAN PRESIDENTIAL ACADEMY  
OF NATIONAL ECONOMY  
AND PUBLIC ADMINISTRATION



## The BRICS Research Group

The concept of the “BRICS” refers to the large emerging countries of Brazil, Russia, India, China and South Africa. Today, the annual stand-alone summits of their leaders, which started in 2009, embrace a broad range of high-level issues requiring global governance, such as economics and finance, trade and investment, health, food and agriculture, development, energy, environment, climate change, social progress, peace, security and international institutional reform.

Led by Marina Larionova of Russia’s Center for International Institutions Research at the Russian Presidential Academy of National Economy and Public Administration and John Kirton of Canada’s University of Toronto, the BRICS Research Group aims to serve as a leading independent source of information and analysis on the BRICS institutions, issues and its members’ underlying interactions.

Together with international partners from the BRICS countries, the BRICS Research Group focuses on the work of the BRICS and diplomacy within the group as a plurilateral international institution operating at the summit level. Particular attention is paid to the relationship and reciprocal influence of the BRICS with other leading global governance institutions such as the G7, the G20 and those of the United Nations galaxy.

Documentation from the BRICS and relevant research and reports are published on the BRICS Information Centre website at [www.brics.utoronto.ca](http://www.brics.utoronto.ca). The BRICS Research Group also conducts analyses of the compliance of the BRICS members with their summit commitments. It also publishes relevant scholarly works and books.

### Selected Publications

*BRICS and Global Governance*

edited by Marina Larionova and John Kirton (Routledge, forthcoming)

*BRICS: A Very Short Introduction*

Andrew F. Cooper (Oxford University Press, 2016)

*BRICS in the System of Global Governance*

Special issue of the International Organisations Research Journal, volume 10, number 2, 2015

<https://iorj.hse.ru/en/2015-10-2.html>

*BRICS: The 2012 New Delhi Summit*

edited by Marina Larionova and John Kirton, with Yoginder K. Alagh (Newsdesk Media, 2012)

[www.brics.utoronto.ca/newsdesk/delhi](http://www.brics.utoronto.ca/newsdesk/delhi)

Trinity College  
at the University of Toronto  
1 Devonshire Place, Room 209N  
Toronto, Ontario M5S 3K7  
Canada  
[www.brics.utoronto.ca](http://www.brics.utoronto.ca)

**BRICS RESEARCH GROUP**  
@BRICSresearch on Twitter

Center for International Institutions Research at  
the Russian Presidential Academy of National  
Economy and Public Administration  
11 Prechistenskaya naberezhnaya  
Moscow, Russia 119034  
[www.ranepa.ru/eng/ciir](http://www.ranepa.ru/eng/ciir)

---

# Innovation, Skills & Labour

---

## COMPLIANCE SCORES

---

*The average level at which G7 members have complied with their priority innovation, skills and labour commitments from the 2016 Ise-Shima Summit*



ICT

+0.69 **85%**

Labour and employment

+0.52 **76%**

Social policy

+0.71 **86%**

Financial regulation

+0.55 **78%**

---

+1 means full compliance, 0 means work in progress or partial compliance, and -1 means no compliance or action antithetical to the commitment.  
Based on a study by the G7 Research Group

---

## KEY TAKEAWAYS

G7 members are facing major social security challenges

As life expectancy increases, it spurs demand for complex healthcare

# ANTICIPATING CHALLENGES

*As global populations age and automation replaces human employment, the social security sector needs to find new methods of sustainable finance, writes **Joachim Breuer***



*An employee of Festo works with a pneumatic lightweight robot at the Hanover Fair (Hannover Messe), Germany, April 2017*

Robotisation creates the risk of replacing taxpaying human workers

Changes in working practice increase individuals' needs for social protection



71.4 YEARS

the average life expectancy at birth of the global population in 2015

5.9M

children aged under five died in 2015 worldwide

## Dr Joachim Breuer



President  
**International Social Security Association**

*Dr Joachim Breuer was elected President of ISSA in 2016. He is also Director General of German Social Accident Insurance (DGUV). He began his career at Germany's Federal Ministry for Food, Agriculture and Forestry and in 1990 joined the Federation of German Accident Insurance Institutions (HVBG). He became Director General of the institution for statutory accident insurance and prevention in the mining industry in 1995. In 2002 he became Director General of the German federation of institutions for accident insurance and prevention. Dr Breuer also co-chairs the International Disability Management Standards Council. From 2008 to 2016, he was Vice President of Rehabilitation International for the European Region.*

@ISSACOMM  
 www.issa.int

G

7 members are facing important challenges regarding their social

security, some of the most acute being the questions of sustainable financing and the maintenance of adequate protection in a changing environment. Among the main causes of these difficulties are ageing populations and the evolution of labour markets.

### Pressures of ageing societies

Ageing societies typically shift the balance between shrinking workforces and growing numbers of beneficiaries of social security, adding to the pressure to finance these benefits. Moreover, life expectancy has risen more than the life expectancy in good health, so there is also an increased need for long-term healthcare and its related costs.

At the same time, the labour market is experiencing a profound change. Rare are the people today who remain in the same job throughout their entire career. People change or accumulate various occupations, move between employment and self-employment and between part-time and full-time jobs; they cross borders, and face unemployment, long-term sickness and other interruptions in their careers. Social security systems need to evolve to offer them



*The digital transformation of our economies is another major evolution of the labour market*



protection adapted to these new working patterns.

### Protecting workers' rights

The digital transformation of our economies is another major evolution of the labour market that will affect the ways in which social security is financed and may increase the risk of lack of coverage. We must ensure that workers who are employed on a short-term contract or freelance basis contribute to the social security system and remain adequately protected through their pensions, occupational safety, health or loss of employment.

The robotisation of work is becoming a reality. It creates the risk of replacing an important proportion of the human workforce, thus potentially increasing unemployment and at the same time reducing the total payroll on which contributions are usually calculated. Measures should be taken to prepare the younger generations to adapt to these changes, and social security might again play a role in the rehabilitation and reinsertion of people left out by this evolution.

### Adaptation to individuals' needs

All these developments increase the need of individuals for protection through social



FATCAMERA/ISTOCKIMAGES

College students working on building a drone

security. Systems must be adapted to become more personalised and adequate to correspond with the careers and life paths of the people they aim to protect. This adaptation will require reaching out to a growing number of self-employed workers as well as new types of economic activity, such as platform or crowd workers. Our social security institutions should not leave these questions only to others. Those institutions are the experts in this field and must actively participate in the debate shaping the future of social protection.

This is why the International Social Security Association (ISSA), which brings together 334 government departments and social security institutions from 158 countries, is actively promoting innovation in social security. ISSA's recent milestone publication *10 Global Challenges for Social Security* is a must-read for all those concerned about the future of social security. The ISSA is also establishing an observatory on the digital economy to study the impacts of this revolution on social security and seek potential solutions to address them.

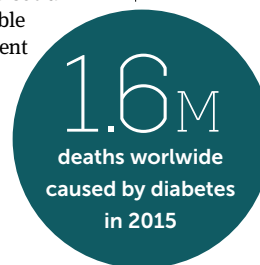
#### ISSA best practice

The ISSA encourages the exchange of good and innovative practices among its members. Through our Centre for Excellence including various sets of

guidelines – which are professional standards for good governance, information and communication technologies and service quality, and other key areas of administration – we support our members in their efforts to adapt their systems to new needs, implement innovative policies effectively and become more efficient.

Social protection is a human right. In line with the United Nations Sustainable Development Goals, G7 governments should take decisive action to maintain or achieve the global objective of universal social protection. It requires sustainable investment in policy development based on the conventions and recommendations of the International Labour Organization, sound attention to institutional development and capacity building, as well as international cooperation and collaboration.

This process of adapting and building the social security of the future can only happen if all parties are involved. Governments, economists, social security institutions and representatives of the employers, employees and beneficiaries must address these challenges together to make sure the solutions are viable, sustainable and acceptable for all. **G7**



## KEY TAKEAWAYS

Average pace of growth in EBRD countries is set to rise to 2.4% in 2017

Strong growth must be accompanied by inclusion of all society sectors

Sir Suma  
Chakrabarti



President  
**European Bank for  
Reconstruction and  
Development**

*Sir Suma Chakrabarti is the sixth President of the European Bank for Reconstruction and Development (EBRD) and was re-elected for a second four-year term in 2016. Before arriving at the EBRD he held the position of Permanent Secretary at the British Ministry of Justice and was its most senior civil servant. Previously, Sir Suma headed the United Kingdom's Department for International Development. He also worked in the UK Treasury and in the Cabinet Office.*

[@ebrdsuma](https://twitter.com/ebrdsuma)  
[www.ebrd.com](http://www.ebrd.com)



# Economic inclusion for all

*Achieving 21st-century development goals requires a 21st-century recipe, writes **Sir Suma Chakrabarti***

A decade ago, a mortgage crisis erupted in the United States, leading to banking sector bankruptcies and a global financial crisis – which led to a full economic crisis.

Only now do the countries served by the European Bank for Reconstruction and Development (EBRD) appear to be on the road to a still fragile recovery. The average pace of growth in all 36 EBRD countries will likely rise to 2.4 per cent in 2017 and 2.8 per cent in 2018, compared to 1.8 per cent last year.

Although this remains below pre-crisis levels and not fast enough to converge with the West any time soon, it is good news. But these figures are almost irrelevant. The pace of growth is important but so is the quality of that economic expansion.

What is the point of strong growth if it leaves whole sections of society – such as women or young people – on the margins? If it is unaccompanied by regulations that address corruption, prevent privatisations enriching only a few people or do not provide for effective delivery of basic social services? If it does not deal with





JAMIL AHMED/XINHUA/ALAMY LIVE NEWS

Labourers in Lahore, Pakistan, May 2017

*The challenge is substantial. We must work as effectively and efficiently as possible*



the threat of climate change? What is the point of growth that is based on short-term investments that do not strengthen economies to deal with future problems? Of growth that does not link economies within countries or across borders, providing the basic infrastructure that assures longer-term prosperity?

### Seeking economic inclusion

Last year the EBRD updated its Transition Concept so that each investment aims specifically at the priorities of making economies more competitive, and also inclusive, well governed, green, resilient and integrated. These six qualities are best suited to equipping EBRD countries for the 21st century.

Especially as populism and nationalism grow and people around the world become sceptical about the benefits of globalisation, the EBRD is emphasising economic inclusion so more citizens share the fruits of progress.

At its annual meeting in Cyprus in May, the EBRD launched its Economic Inclusion Strategy to scale up engagement in inclusion and widen outreach to more excluded sections of society.

### Alignment to deliver the 2030 Agenda

The six priorities listed above align closely with the Sustainable Development Goals (SDGs) to deliver the 2030 Agenda. The SDGs focus on investment and sustainable economic outcomes and correspond with the EBRD's focus on economic results, although the bank has added elements that temper the free market economy focus.

The challenge now is to seek the finance needed to deliver the SDGs – not billions in state aid but trillions of blended finance combining private and public sector sources.

The EBRD is a public sector institution firmly focused on developing and working with the private sector. Over 26 years it has provided finance of nearly €120 billion. Typically every euro provided by the EBRD has attracted additional private sector funding of 2.3 euros.

### Encouraging investment

With innovative and pioneering solutions for renewable or energy efficiency investments, the EBRD shows other investors what is possible, encouraging them to invest either with us or alone.

Through developing investment councils in several countries and working on regulation with national authorities, the EBRD also helps create the climate needed to incentivise investment by third parties.

### Collective effort needed

To achieve the SDGs, a truly collective, global effort is needed. All the multilateral development banks must work with governments, the local private sector and international investors to create a policy environment that attracts more and better private investment and increases the capacity to absorb higher crossborder flows.

We need to focus more on equity flows. Firms in EBRD regions that benefited from private equity investors have grown faster and invested more than others. When possible, we need to supply local currency and encourage the development of long-term, sustainable and liquid local currency markets.

And we need to know when to step back. We strive to crowd in private flows in a way that does not hinder the development of sustainable commercial financial markets. Additionality is essential.

The challenge is substantial. We all must work as efficiently and effectively as possible, ensuring the sum of our combined efforts is greater than our individual contributions. But by pooling our efforts and our expertise I am confident we can succeed. **G7**

€120bn

The total amount of finance that the EBRD has provided in the past 26 years

ARMIN WEIGEL/DPA



# Tomorrow's work

*While the pace of technological change may be fuelling job insecurity, it is vital that governments take a proactive stance in shaping the future of employment to foster work and an inclusive global economy, writes **Guy Ryder***

## KEY TAKEAWAYS

ILO is researching future work

Technology is destroying and creating jobs

Wages have been stagnant for decades

When the G7 leaders meet in Taormina they will have many pressing issues to discuss. Nevertheless, they will also make time to look into the future and discuss how to prepare their societies and economies for a rapidly changing world of work.

This topic is at the forefront of the agenda of the International Labour Organization (ILO). Our organisation is pleased to support the G7's considerations both for the summit

and for a series of ministerial meetings in September, including the meeting of labour and employment ministers. In preparation for the ILO's centenary in 2019, we have launched a worldwide initiative of discussion and research to inform a debate about the forces changing the world of work and the policies we need to shape the future we want.

### Multiple causes of change of work

Much attention focuses on the impact of technological change on work, including the radical effects of the digital revolution. It is important, however, to understand the many different forces affecting work and to place technological change in the wider global context of demographic shifts, environmental challenges, increased international economic integration and evolving social attitudes towards the role of work in our lives.

Technological changes are inevitably dynamic processes that involve both destroying and creating jobs and transforming existing jobs, particularly in how work is organised. The extent and speed of technological change have always been subject to debate, with diverging views between optimists and pessimists.



Employees working on the production lines at the Siemens AG production plant in Amberg, Germany

### Areas for debate

ILO analysis shows that the outcome of the fourth Industrial Revolution may not be as negative as some have suggested. Creating more jobs than destroying them is possible in the near future. Even so, many other issues deserve serious policy debate, and the economic and social outcomes of technological changes depend on how countries address three key issues:

- Avoiding the destruction of 'good' jobs and the creation of 'bad' jobs, even though total employment increases.
- Managing the adjustment to technological change, not just by the market processes but also through social and economic policies.
- Distributing productivity gains between economic and social groups at a time when overall income inequality is already historically high.

These issues will be on the agenda for many years. Recalling the predictions of futurologists does not create much confidence in our ability to know today what tomorrow's world of work might look like. But one solid conclusion we can draw

is the need to prepare to handle change even as its contours shift and to ensure our policy toolbox is ready.

### Fears on job security

In many G7 members there is widespread anxiety about jobs security. Unemployment is still high and rates of labour force participation are down in many countries. Real wages for all but the very highest paid have been stagnant for decades. Although many have benefited from the intertwined forces of globalisation and technological changes, some communities have been hit very hard by job losses. Headlines about 'robots stealing jobs' appear regularly. On the political campaign trail politicians easily play on these fears and create inward-looking tendencies that damage multilateral cooperation and make many of the world's problems much harder to address.

Enhanced employment and social policy packages can make growth and development more inclusive and stronger by creating a framework in which technological change at work can be promoted and shaped. The agenda for national policy dialogues among governments, workers and employers on sustainable development strategies includes:

- Quality training and employment services
- Strengthened social protection systems
- Social dialogue based on respect for fundamental principles and rights at work
- Infrastructure investment, in water and sanitation, transport, energy, connectivity and housing
- 'Green' jobs to reduce climate change
- Support for developing sustainable small and medium-sized enterprises, especially regarding investment in new technologies
- Well-balanced labour laws that encourage stable employment relationships
- Counteracting gender and other forms of discrimination at work
- Affordable and accessible child and elder care
- Minimum wage-setting systems and collective bargaining between strong and representative unions and employers.

Successful innovation strategies are about building a culture at work and in society that speeds, spreads and shapes technological change so that no one is left behind. The Taormina Summit is an opportunity for G7 leaders to set out a people-oriented vision not so much of the precise future of work but rather of how societies are going to handle far-reaching changes and ensure that our economies and societies are inclusive. **G7**

Guy  
Ryder



Director General  
**International Labour  
Organization**

*Guy Ryder has been Director General of the International Labour Organization (ILO) since 2012, having held various senior positions in the ILO from 1999 to 2002 and again since 2010. He leads the organisation's action to promote job-rich growth and to make decent work for all – a keystone of strategies for sustainable development. He has a background in the trade union movement and is the former General Secretary of the International Trade Union Confederation.*

 @GuyRyder  
 [www.ilo.org](http://www.ilo.org)

2012

onwards, OTC derivatives have been traded through centralised counterparties

90%

of Japan's government bonds are owned by resident investors

# Resilience is key to financial security

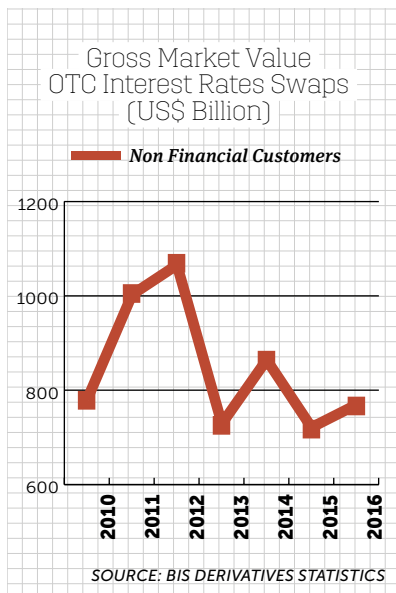
*In light of increasing uncertainties in several nations, it would be wise for the G7 to consider a global approach to reach financial robustness, writes Chiara Oldani*

In March 2017, the G20 finance ministers and central bank governors affirmed that “an open and resilient financial system is crucial to supporting sustainable growth and development. To this end, we reiterate our commitment to support the timely, full and consistent implementation and finalisation of the agreed G20 financial sector reform agenda.” Since 2009, significant progress has been made with respect to banking supervision and capitalisation, which has led to the Basel III regulatory framework. The resilience of the financial system increased because of improved capitalisation of intermediaries. The Financial Stability Board (FSB) is working on transforming shadow banking into resilient market-based finance, as a valuable alternative to banking, and regulatory coordination is the tool to achieve this goal.

## The root of the crisis

Since 2012, over-the-counter (OTC) derivatives, considered to be at the root of the 2008 financial crisis, have been traded mainly through centralised counterparties, significantly reducing market risks.

The G20 addressed the role of OTC derivatives. This was a step in the right direction, but global regulatory reforms lack transatlantic coordination. Moreover, governments, local administrations, municipalities and non-financial firms – that is, non-financial operators – are not



Chinese Finance Minister Xiao Jie (R) meets with US Treasury Secretary Steven Mnuchin

included in the new regulatory framework. Such trading has been exempt because of the relatively small size and supposedly simplistic nature of the products (see graph). But the interconnected global financial system can create conditions for a domino effect, which can alter financial stability.

## Priorities of the G7 hosts

The constructive position taken by the G20 finance ministers and central bankers on financial regulation and its coordination



XINHUA/LUO HUANHUAN / ALAMY

might not coincide with that of the G7 leaders. The priorities set out by Italy as host of the 2017 Taormina Summit do not mention global finance, regulatory coordination or financial risk. It is very likely that the leaders will not address these issues, and will wait for the elections in Germany, Italy, Japan and the United Kingdom to take place between now and 2018. In fact, the decision of British voters to leave the European Union, the election of Donald Trump in the United States, and a growing mood of nationalism and isolationism in Europe, the United States and Japan all create profound challenges to the consensus on openness and international cooperation that has guided

## Chiara Oldani



Professor of Monetary Economics  
**University of Viterbo**

*Chiara Oldani is Professor of Monetary Economics at the University of Viterbo “La Tuscia” and the Director of the Rome office of the G7 Research Group. Her research currently focuses on over-the-counter financial derivatives and the complex web of counterparty risk, widely considered a major precipitating factor of the global financial crisis.*

 [@chiaraoldani](https://twitter.com/chiaraoldani)  
 [www.viterbo.edu](http://www.viterbo.edu)

*Brexit and ‘Trumponomics’ aim to reduce the rigidities of financial systems in order to compete in the global financial system more aggressively*

global financial governance in the recent past. Brexit and ‘Trumponomics’ aim to reduce the rigidities of financial systems in order to compete in the global financial system more aggressively. However, this structural change leads to regulatory arbitrage for financial and non-financial intermediaries, reduces the competitiveness of European financial intermediaries, which are subject to heavier capital requirements, and, ultimately, alters the resilience of the global financial system.

### **Domestic vulnerability**

In recent years G7 members have also faced the fragility of some banking systems and the rise of public debt. The gross public debt over gross domestic product of Japan is 250 per cent and greater than 100 per cent for Italy and the United States. This will not significantly diminish in the coming years. In terms of net public debt, the reduction is proportional for all G7 members (Japan 127 per cent, Italy and the United States 82 per cent). The burden of G7 public debt lies mainly domestically: in Japan, 90 per cent of government bonds are owned by resident investors, and in the United States and Italy, 65 per cent are owned by mainly banks and financial intermediaries. Banks and governments depend on each other, in a perverse relationship that fuels moral hazard. The banking systems of some G7 members are very fragile, increasing the perceived risk of crisis. Italy, hosting the 2017 G7 summit, is a highly indebted country that should actively promote financial coordination and fight isolation, because the current modified financial and regulatory environment can dramatically increase the risk of crisis. **G7**



## G20 Research Group

The G20 Research Group is a global network of scholars, students and professionals in the academic, research, business, non-governmental and other communities who follow the work of the G20 leaders, finance ministers and central bank governors, and other G20 institutions. It is directed from Trinity College, the Munk School of Global Affairs and the Department of Political Science at the University of Toronto, which also host the G7 Research Group and the BRICS Research Group.

Our mission is to serve as the world's leading independent source of information and analysis on the G20. As **scholars**, we accurately describe, explain and interpret what the G20 and its members do. As **teachers and public educators**, we present to the global community and G20 governments the results of our research and information about the G20. As **citizens**, we foster transparency and accountability in G20 governance, through assessments of G20 members' compliance with their summit commitments and the connection between civil society and G20 governors. And as **professionals**, we offer evidence-based policy advice about G20 governance, but do not engage in advocacy for or about the G20 or the issues it might address.

**Background Books and eBooks** With Newsdesk Media in the United Kingdom, for each summit the G20 Research Group produces a "background book," freely available in print and online, outlining the perspectives of the leaders and key stakeholders and offering analysis by leading global experts. It also works with Newsdesk Media to produce free eBooks and analysis available at [G7G20.com](http://G7G20.com).

**Compliance Assessments** For each summit the G20 Research Group, working with the Russian Presidential Academy of National Economy and Public Administration (RANEP), assesses each G20 member's compliance with the previous summit's priority commitments. Cumulative compliance assessments are compiled on key issues.

**Pre-summit Conferences** With a local partner in the country hosting the summit along with a core group of international partners, the G20 Research Group produces a conference in the lead-up to each summit analyzing the institutional workings of the G20 and the issues, plans and prospects for the summit.

**Field Team** The G20 Research Group sends a field team to each summit and some ministerial meetings to assist the world's media, issue its own reports and analyses, allow students to witness world politics at the highest level at close hand, and collect the documents and artifacts uniquely available at the summit, to build the G20 archives at Trinity College's John Graham Library and online at the G20 Information Centre website.

### **G20 Information Centre @ [www.g20.utoronto.ca](http://www.g20.utoronto.ca)**

The G20 Information Centre is a comprehensive permanent collection of material available online at no charge. It complements the G7 Information Centre, which houses publicly available archives on the G20 as well as the G7 and G8, and the BRICS Information Centre, as well as Newsdesk Media's [G7G20.com](http://G7G20.com).

**Speaker Series** The G20 Research Group hosts occasional speakers in its efforts to educate scholars and the public about the issues and workings of the G20. Past speakers have included senior officials of the International Monetary Fund and the World Bank and scholars and policy makers from Mexico, Turkey, China, Australia, Brazil, Italy and elsewhere.

**Research** The G20 Research Group conducts research on the causes of summit and system performance and the G20's relationship with the G7/8, BRICS, United Nations and other formal multilateral institutions.

### **Publications include:**

- *China's G20 Leadership*, by John Kirton (Routledge)
- *The Global Governance of Climate Change: G7, G20 and UN Leadership*, by John Kirton and Ella Kokotsis (Routledge)
- *Mobilising Climate Finance*, by John Kirton (Newsdesk Media)
- *G20 Governance for a Globalized World*, by John Kirton (Routledge) (also available in Chinese)
- *The G20: Evolution, Interrelationships, Documentation*, by Peter I. Hajnal (Routledge)

### **G20 Research Group**

Munk School of Global Affairs, 1 Devonshire Place, Room 209N, Toronto, Ontario M5S 3K7 Canada  
Telephone 1-416-946-8953 • E-mail [g20@utoronto.ca](mailto:g20@utoronto.ca) • Twitter [@g20rg](https://twitter.com/g20rg)

[www.g20.utoronto.ca](http://www.g20.utoronto.ca)

---

# Strengthening the G7 System

---

## COMPLIANCE SCORES

---

*The average level at which G7 members have complied with their overall commitments from the 2016 Ise-Shima Summit*



Overall compliance

+0.51    **75%**

---

+1 means full compliance, 0 means work in progress or partial compliance, and -1 means no compliance or action antithetical to the commitment.  
Based on a study by the G7 Research Group

---

# Preserving consensus

*The EU and the G7 need to consolidate their cooperation to meet the challenges presented by antiglobalisation and populism, write Jan Wouters and Sven Van Kerckhoven*

The European Union and the G7 were both founded on the idea that cooperation, coordination and integration ultimately benefit their membership and the international community at large.

The EU has brought together an increasing number of European countries in a strongly integrated 'ever closer union' with a broad and deep delegation of powers to supranational institutions, resulting notably in the world's largest single market and second-largest currency, the euro.

The G7 can be best described as an informal intergovernmental forum aimed at achieving policy coordination between its members. Compared to the EU, it lacks a legal basis, formal rules for membership and mechanisms for implementing its decisions. But it has allowed its members to find agreement on a variety of issues, and can be perceived as steering the global economy.

## The EU in the G7

The EU has participated in G7 summits since 1977, when the President of the European Commission and the rotating presidency of the Council (now the permanent President of the European Council) were invited for the first time. It has, however, never been considered a fully fledged member, whereas four of its member states are.

Both the G7 and the EU have been successful in increasing cooperation and coordination. In recent years, though, they

have both become more contested than ever before. Antiglobalisation and Eurosceptic movements have been around for a long time, but remained fringe movements. This is no longer the case, as recent elections in Europe and the United States have shown.

## Formerly the G8

Another challenge arose in 2014, when Russia – the eighth member in the G8 – annexed Crimea, in a clear breach of international law. G7 leaders spoke out against this, and eventually decided to suspend Russia from the G8. This heralded a return to the initial set-up of the G7. At the same time, it strengthened the relationship between the EU and the G7, as the June 2014 summit location was Brussels, rather than Sochi as originally planned. One significant issue is that, by putting Russia on the sidelines, the G7 no longer has a common participant in the BRICS group of Brazil, Russia, India, China and South Africa.

## Brexit as a setback

A more recent setback for international cooperation was the Brexit referendum on 23 June 2016, when UK citizens decided to leave the EU. This was celebrated as a victory by many Eurosceptics in the UK and in other EU members, and it shows that globalisation and coordination are not always considered positively by voters. Brexit is a serious blow to the European integration process. It also



*Since Trump assumed office, the US position in both the G7 and the G20 has been less cooperative*





**G7 members had to fight the US to push fossil fuels forward on the agenda**

**G7 primarily makes decisions and coordinate policies swiftly**



A Brexit-inspired mural by Banksy on the Castle Amusements building in Dover, Kent

CHRISTOPHER TAPLEY/STOCKIMONNEWS/ALAMY

renders the workings of the EU in the G7 more cumbersome. For 40 years, the Old Continent was represented by four countries in the G7 as well as by the EU itself (as an active participant). That this cooperation between the UK and the other European G7 members no longer holds became clear during the G7 foreign ministers' meeting in Lucca on 10–11 April 2017. The United Kingdom proposed additional sanctions against Russia, but this proposal was resisted by Italy and Germany and the idea failed to make it into the final communiqué.

### The Trump card

Another major change came with the election of Donald Trump as President of the US. Since he assumed office, the US position in both the G7 and the G20 has

been less cooperative. In the spring of 2017, due to pressure from the US, the G20 dropped its antiprotectionist pledge and the other G7 members had to fight the US to push fossil fuels forward on the agenda.

### Purpose of the G7

All these issues pose problems to the functioning relationship between the EU and the G7. The *raison d'être* of the G7 is its ability to make decisions and coordinate policies swiftly. If the like-mindedness on which it was always premised lapses due to the Trump administration and possibly due to frictions caused in the relationship between the United Kingdom and the European Union and its members because of fraught separation negotiations, the G7 may be facing daunting challenges in the coming years. **G7**

Jan Wouters



Director  
**Institute of  
International Law**

*Jan Wouters is a Professor of International Law and International Organisations, and the founding Director of the Institute for International Law and Leuven Centre for Global Governance Studies.*

@JMFWouters  
 [www.law.kuleuven.be](http://www.law.kuleuven.be)

Sven Van Kerckhoven



Professor  
**Vesalius College**

*Sven Van Kerckhoven is Co-chair of the Business and Economics Department at Vesalius College and affiliated with the Faculty of Economics and Business at the University of Leuven.*

[www.vesalius.edu](http://www.vesalius.edu)

**69%** G7 multi-year average compliance on education

**100%** G7 compliance with Ise-Shima commitment on Paris Agreement



# From commitments to compliance

*Effective monitoring of G7 members' achievements is an essential means of evaluating concrete summit progress, writes **Brittaney Warren***

## KEY TAKEAWAYS

259 climate change commitments made since the summit began

G7 multi-year average compliance on labour and employment is 76%

The Taormina Summit will catalyse the Fourth Industrial Revolution

For 42 years, the G7 has met annually to deliberate on the world's most pressing issues, using its summit to collaborate and coordinate on advancing its distinctive mission of promoting liberty and democracy. G7/8 leaders thus politically bind themselves to take action by crafting collective, future-oriented commitments on several subjects. These include the priorities identified by the host, reflecting the events of the day but also building continuity from summit to summit. These commitments can be identified and monitored by independent organisations such as the G7 Research

Group based at the University of Toronto. In this way, G7 leaders can be held to account for the promises they make and evidence-based recommendations can be made to improve performance. In a world facing traditional security and new non-state threats, compounded by rising inequality, monitoring and improving the work of the G7 is more important than ever.

### Citizen safety

Indeed, new non-state threats are the focus of Italy's G7 presidency, with the refugee crisis and terrorism falling under the host's first pillar of 'citizen safety'. A long-standing issue for the G7 – terrorism – was highlighted at the 2016 Ise-Shima Summit with a record number of 31 commitments. Attention to migration and refugees also peaked at Ise-Shima, with 11 commitments. This was no surprise, as the war in Syria alone has forced an estimated 11 million people to flee the country; over one million refugees have attempted the perilous journey across the seas seeking a better life on European shores. This shock has spurred some success from the G7, whose average compliance with the priority migration commitment made in 2016 halfway between the Ise-Shima Summit and the 2017 Taormina Summit was 81 per



The G7 leaders visit the Ise-jingu Shrine during the Ise-Shima Summit, Japan, May 2016

cent. All G7 members thus either fully or partially complied with their commitment to “support displaced persons and their host communities and to working towards a long-term, sustainable post-conflict stabilisation and rehabilitation of Syria and to eradicating conditions conducive to violent extremism”. This figure is on a par with the G7’s overall multi-year average on terrorism of 81 per cent, but lower than that on migration and refugees of 90 per cent.

#### Climate change commitments

Italy’s second pillar is to support the United Nations Sustainable Development Goals (SDGs) and the 2030 Agenda. Although the SDGs encompass a broad range of issues, the Italian presidency focuses on five, with implementation of the Paris Agreement on climate change topping the list. Overall, there is room for improvement in regard to fulfilling climate change commitments, of which 259 have been made since the summit’s start. Here multi-year compliance is moderate at 73 per cent. On the Paris Agreement in particular, support remains strong from the majority, with one obvious caveat created by US President Donald Trump. As the G7 Research Group’s Interim Compliance Report shows, all G7 members



## New non-state threats are the focus of Italy’s G7 presidency



ratified the Paris Agreement, receiving a score of 100 per cent compliance on this Ise-Shima commitment. G7 leaders will be expected to make commitments outlining how they will implement and improve the Paris Agreement to keep global temperatures from rising further. Precision, however, will prove challenging in the face of a US president sceptical about climate change.

#### Complying with the 2030 Agenda

On the 2030 Agenda, Italy will also lead the G7 to make progress on food security and nutrition, where overall multi-year compliance is 77 per cent. On gender, falling within the theme of inclusivity, compliance is much lower at 64 per cent.

Italy’s third pillar can help improve compliance in these areas. The Next Production Revolution, sometimes called the Fourth Industrial Revolution, could, if approached wisely, help close the inequality gap. The future of work, a sub-theme of this third pillar, should include preparing the workforce for the transition to a clean economy, helping compliance with the G7’s climate change commitments. Ensuring everyone has access to high-speed broadband service will help youth and women entrepreneurs integrate more effectively into global value chains and so help improve compliance, not only with gender commitments but also with labour and employment commitments, which are now at a multi-year average of 76 per cent. Ensuring the digital revolution is accessible and affordable for all could help raise the G7’s multi-year compliance on education from 69 per cent.

This year G7 leaders will continue to work together to build on the 2016 Ise-Shima agenda by crafting precise commitments at the Taormina Summit with the goal to decrease insecurity and inequality, grow sustainably, and catalyse the Fourth Industrial Revolution. **G7**

## Brittaney Warren



#### Researcher G7 Research Group

*Brittaney Warren is a Researcher with the G7 Research Group, the G20 Research Group and the BRICS Research Group, based at the Munk School of Global Affairs in Trinity College at the University of Toronto. Brittaney leads the work on commitments and compliance, specialising in the issue areas of climate change, environment and energy.*

[@brittaneywarren](https://twitter.com/brittaneywarren)  
[www.g7.utoronto.ca](http://www.g7.utoronto.ca)

## KEY TAKEAWAYS

The G7 has a well-established dialogue with NGOs

Italy has built on the experience of previous G7/8 summits

### Peter I Hajnal



Fellow of Senior College  
**Munk School  
of Global Affairs**

*Peter I Hajnal is a Fellow of Senior College and a Research Associate at the Munk School of Global Affairs at the University of Toronto. He has been a member of the G7 and G20 Research Groups since 1988 and attended 14 summits as a media correspondent. He is also a member of the Academic Council on the United Nations System, the Union of International Associations and the American Library Association. He is the author, most recently, of The G20: Evolution, Interrelationships, Documentation.*

[www.g7.utoronto.ca](http://www.g7.utoronto.ca)



Germany's GIZ and Oxfam are helping out with seminars on women's rights and with educating women

G7 governments have benefited from G7 Research Group reports

Civil societies have formed their own groups to prepare for the summit

DPA PICTURE ALLIANCE / ALAMY STOCK PHOTO



# Advocacy and engagement

*Dialogue with civil society organisations is a well-established aspect of G7 summits, and Italy is continuing the tradition, says Peter I Hajnal*

As host country of the 2017 Taormina Summit, Italy has continued the now well-established tradition of G7 dialogue with non-governmental organisations (NGOs) and other civil society organisations (CSOs). Italy's Ministry of Foreign Affairs convened a meeting with more than 60 CSO representatives in April 2017, discussing issues largely in accord with the priorities of the host government and CSOs: financing for development, climate and energy, migration and the refugee crisis, food security, agriculture and nutrition, global health, education, and gender issues. The meeting followed one on 27 January between an NGO delegation and G7 sherpas.

In its interaction with CSOs, Italy has built on the experience of previous G7 summits, particularly since the G8's 1998 Birmingham Summit, which was a watershed in G7/8 relations with civil society – although the process has not been without setbacks such as the lack of consultations around the 2004 Sea Island Summit and the rather hastily called 2014 Brussels Summit, which did not have enough preparation time for CSO interaction. Such interactions have

become the norm, although some host governments have allowed CSO access but not meaningful consultations.

## Summit commitments

Another dimension of CSO interaction with G7 officials is monitoring and evaluating the fulfilment of summit commitments. The University of Toronto G7 Research Group and the campaigning and advocacy organisation ONE have been especially active in this area. G7 governments have benefited from the resulting reports and analyses. Other CSOs have prepared and submitted policy papers either to all G7 governments or a particular one, such as InterAction, which has communicated its papers to the US government.

Italy seeks the active involvement of various non-state actors in the G7 process: Civil7, ThinkTank7, Labour7, Science7, Women7 and Youth7 and the Business7. Absent from the Italian list are faith-based groups, even though they have raised economic, social and moral issues with both the G7 and the G20 for years, and have much to contribute. In fact, most such groups have had several years of experience

*The 1998 G8 summit in Birmingham was a watershed in G7/G8 relations with civil society*

with the G7 and the G20. Host-government receptivity to participation and input by CSOs and other non-state actors have been mutually beneficial to the 'Gs' and non-state actors alike.

## Willing to engage

Various factors have contributed to successful CSO-G7 interaction. First, both CSOs and G7/G20 governments must be willing to engage with each other in a meaningful, serious and substantive manner, rather than just staging ritualised meetings and garnering mere pro forma official acknowledgement of civil society's role. Equally important is timeliness; CSOs and governments need careful preparation for the summit, including the sherpa and ministerial process leading up to the summit. When CSOs focus on issues that are also on the G7 or G20 agenda, government officials tend to be more receptive to their input, thus increasing civil society's potential to influence summit outcomes.

Civil society groups have been active around G7 and G20 summits beyond the conference table to undertake dialogue with government representatives. They have formed their own groups to prepare for the summit, formulate their proposals and engage in advocacy (Oxfam and the Global Call to Action against Poverty are good examples). They have staged their own summits and street demonstrations; as long as these actions are peaceful, they enhance democracy – a stated common value of the G7.

It is to be hoped that civil society's role and impact at the Taormina Summit will be positive, peaceful and mutually beneficial to CSOs and governments alike. This could then set a model for future summits. **G7**

---

# INDEX OF ADVERTISERS

<b>World Food Programme</b>	02
<b>Duff &amp; Phelps</b>	12
<b>Nazounki</b>	17
<b>G7G20.com</b>	20
<b>Prince Sultan Institute</b>	38
<b>G7 Research Group</b>	53
<b>Janssen</b>	62
<b>AkzoNobel</b>	68
<b>IULM – International University of Languages and Media</b>	96
<b>Scuola Normale Superiore (Pisa – Florence)</b>	100
<b>Education International</b>	104
<b>BRICS Research Group</b>	106
<b>G20 Research Group</b>	118
<b>Routledge</b>	127
<b>Eni</b>	128

# From Routledge...

## China's G20 Leadership

*John J. Kirton*

A comprehensive examination of China's diplomacy and influence on the G20 since the group's start as a forum for finance ministers and central bankers in 1999 through its elevation to the leaders' level in 2008. It examines China's role in the summits and its plans and prospects for the 2016 Hangzhou Summit.



## The Global Governance of Climate Change

G7, G20, and UN Leadership

*John J. Kirton and Ella Kokotsis*

An analysis of four decades of intergovernmental regimes for controlling global climate change from its 1970s origins to the present and demonstrates the effectiveness of the G7/8 and G20 summit as an alternative to the United Nations.

## The G8-G20 Relationship in Global Governance

*By Marina Larionova and John J. Kirton, editors*

The growing demand for global governance breathed new life into the G7/8 and the G20, and raised questions about the relationship between them. This volume considers the rough division of labour and the interconnections – and how that relationship can be improved.



## G20 Governance for a Globalized World

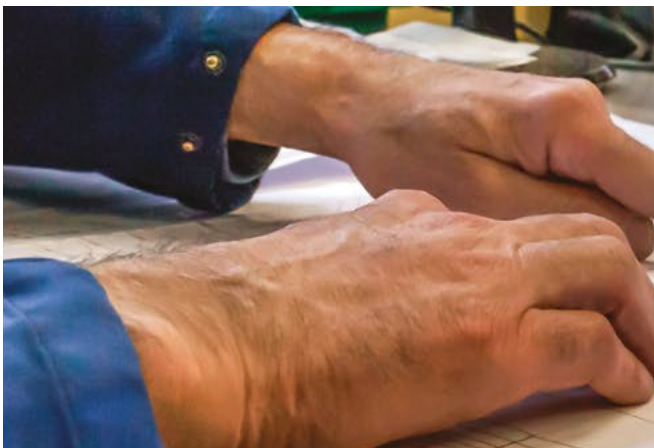
*John J. Kirton*

Follow George Bush and Barack Obama, Gordon Brown and David Cameron, Stephen Harper, Angela Merkel and other key leaders as they struggle to contain the worst recession since the Great Depression of the 1930s. This book provides a full account of the first four G20 summits from Washington to Toronto and beyond.

Also available as eBooks  
Visit [www.routledge.com](http://www.routledge.com)



The energy  
to see  
and the energy  
to do.



Our energy has been traveling around  
5 continents for over 60 years.  
Thanks to the work of all our hands.

