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## NEC Talks with Olivier Blanchard

Former Chief Economist at the International Monetary Fund, Olivier Blanchard had an important role in the management of the recent crisis.

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# MEET OUR TEAM

NEC is a club dedicated to challenging, discussing, and developing economics, making the difference through education, communication and, above all, practice.

In between the last published newsletter and this magazine, we had substantial growth. The referred time lapse was crucial to promote new activities and events with new governmental and institutional partnerships, enhancing quality research and stimulating the public debate on key economic topics.

On this growth trend, we now relaunch our former newsletter as a magazine, focused on serving your economic and political interests, as well as providing you a cluster of news within economic issues. It is with great pleasure that the NEC team embraces this challenge once more, now with the contribution of the eighteen young economists that joined this semester.



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## ECONOMISTS IN THE SPOTLIGHT

PAUL-LEONARD GLOECKNER

Welcome back! After a long summer break, the NEC Newsletter is back. But **NOW AS NEC MAGAZINE**. This is going to be the brand for Nova Economics Club's coverage of news and articles concerning the most recent development in economics and socio-economic affairs.

Our new edition for September and October covers the period in which the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel was announced. Richard Thaler was awarded this year's Nobel Prize on 9 October 2017. Fortunately, we put him into the spotlight and include his biography in this edition, so that young economics know who he is and why his work contributed so much to economic science.

This new edition, presents one more great Economist, Olivier Blanchard. We got the chance to interview Olivier Blanchard in person and learn from his expertise. This edition also includes a diverse set of articles ranging from Economics of Water to Latin America Politics. Enjoy this first edition of our new NEC Magazine!

JOÃO MATIAS



PAUL-LEONARD GLOECKNER



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# SEPTEMBER IN REVIEW

*Reviewed by Rodrigo Barrela*


## 1 BRAZIL EMERGES FROM ITS WORSE RECESSION

The worst recession in the country's history officially ended in the second quarter of 2017, with GDP growing 0.2 percent in this period. This comes as a relief for the scandal-hit government of Michel Temer, which showed low approval ratings of about 5 percent. 


decided to resign from his post.

economic, financial and social costs with this embargo. 


## 5 FED'S BRAINARD URGES CAUTION ON RATES OVER LOW INFLATION

Lael Brainard, a Fed governor, spoke on September 5th about the weakness of price growth over the past five years, labeling it as "troubling", calling for a more gradual raise of the federal funds rate in order to avoid the persistent shortfall of inflation from the Fed's target. 

## 7 ECB HOLDS RATES AND QE; EYES DOWN FOR PRESS CONFERENCE

The ECB decided to leave interest rates and its Quantitative Easing program on hold. Nonetheless, analysts expect the Bank to reduce its bond-buying behavior early next year, even though an official decision is not expected until late October. 

## 16 EU EFFORTS TO IMPOSE HEAVIER TAXES ON TECH GIANTS GATHER MOMENTUM

France is currently pressing for a new EU law that "would allow governments to impose a levy on internet giant's revenues". A growing number of countries is now backing up this initiative, since this measure would require unanimous backing from member states to be adopted. However, a small number of ministers have presented themselves against this law, claiming that it could only be agreed on at a global level. 


## 5 HONG KONG REGULATOR WARNS ON INITIAL COIN OFFERINGS

The Hong Kong security regulator promised to increase regulation on the initial coin offerings (ICO), which attracts many investors with the promise of high returns. This comes at a time where some of these ICOs reveal themselves as scams, raising suspicions of "illegal securities issuance, financial fraud and other "criminal activity"". 

## 13 OECD COUNTRIES IN BOUT OF CORPORATE TAX COMPETITION

The Organization for Economic Co-Operation and Development (OECD) said that competition on corporate tax "was intensifying", which the organization claims being partly motivated by weak investment all around the world. These taxes were cut on average by 2.7 percentage points, with Hungary leading the rate, cutting its rate to 9 percent. The organization also talks about an apparent paradox, since these tax cuts are not being reflected in a decrease in corporate tax revenue. 

## 20 US FEDERAL RESERVE CALLS HISTORIC END TO QUANTITATIVE EASING

Janet Yellen, the Federal Reserve's Chair, has signaled the end of the Quantitative Easing program, announcing a gradual increase in the part of the money received from maturing bonds that is redeemed and not reinvested into asset-buying actions. 


## 6 STANLEY FISCHER RESIGNS AS FED VICE-CHAIRMAN

At 73, the Zambia born economist presented his resignation letter, thus ending his term as vice-chair of the Fed, a post he had held since 2014. A former professor at MIT, Fischer was a teacher of economists like Ben Bernanke, Mario Draghi and Larry Summers. He cited "personal reasons" as why he

## 13 QATAR INJECTS \$38BN INTO ECONOMY TO COUNTER EMBARGO

Following the embargo imposed by its neighbor countries, Qatar decided to inject \$38.5bn of its \$340bn reserves into its economy. The rating agency Moody's estimates that the equivalent of 23 per cent of Qatar's GDP was used to reduce the negative effects of the embargo during its first two months. With major capital outflows, a reduction in trade of almost 40 percent and a decreased rate of tourism, the country is doomed to face major


## 26 WORLD BANK WARNS OF A 'GLOBAL LEARNING CRISIS'

The latest World Development Report released by the World Bank alarms of a "global learning crisis", as the number of children attending schools in least developed countries increased while actual learning benefits do not seem to flourish. The report claims a combination of corruption and badly trained teachers as main causes for this problem, whose ultimate result is a further increase in skill gap between poor and rich countries' labor force. 


# OCTOBER IN REVIEW

Reviewed by Pedro Pereira


## 1 HUNDREDS INJURED AS SPAIN CRACKS DOWN ON CATALAN REFERENDUM

The declared illegal independence referendum in Catalonia was marked by extremely violent scenes while the national police attempted to crackdown the referendum. The Catalan leader vowed to declare independence from Spain. 

## 6 CATALONIA'S INDEPENDENCE REFERENDUM: FINAL RESULTS SHOWED 90% BACKED SECESSION FROM SPAIN


The outcome of the independence referendum showed that, according to the Catalan officials, 90% of the voters support the creation of a new state and the separation of the region from Spain. As previously announced, Madrid ignores the results after Spain's constitutional court declared the poll illegal. 

## 9 THALER, KNOWN FOR THE 'NUDGE' THEORY, WINS NOBEL ECONOMICS PRIZE


At 72, the economist and professor at the University of Chicago, sees his 40 years' work on studying human bias and temptation while his colleges insisted to view people as rational actors. Richard Thaler, the "father" of Behavioural Economics, is rewarded with the Nobel Economics Prize. 

## 11 INFLATION CLOUD HANGS OVER FEDERAL RESERVE

The Federal Reserve's most recent policy meeting raised talks over the risks of low inflation, including a scenario in which the planned rate hike before the end of the year would be postponed. Despite opposing

views of many policymakers of the US central bank, a body of Fed's policymakers is troubled by this year's weak inflation. 


## 18 CHINA Q3 GDP GROWS 6.8 PERCENT YEAR-ON-YEAR AND MEETS EXPECTATIONS

China's economy grew by 6.8% in line with expectations and 1 p.p. below the previous quarter's growth while fixed asset investment growth slowed. Beijing is aiming for a 6.5% growth by the end of 2017, which would be the weakest pace in 27 years. 


## 24 CHINA ENSHRINES 'XI JINPING'S THOUGHT', ELEVATING THE LEADER TO MAO-LIKE STATUS

Xi Jinping's thoughts are the first to be inscribed in the Communist Party Constitution after the era of the historical leader Mao Zedong. This can be considered to be a historical event in Chinese politics because to is a strong signal which reconfirms Mr. Xi's power. Going forward, his ideas will now be taught at schools and will be much more present in the media. 


## 24 CHINA ENSHRINES 'XI JINPING'S THOUGHT', ELEVATING THE LEADER TO MAO-LIKE STATUS

After winning the elections, the youngest prime-minister in Europe received the mandate by the president to form a government. Sebastian Kurz invited the right-wing Freedom Party, the third political force, on talks to become part of the executive, reinforcing the right-shift in Europe's central-east politics. 

## 27 CATALANS DECLARE INDEPENDENCE AS MADRID IMPOSES DIRECT RULE

The Catalan regional parliament has declared independence from Spain with the opposition leaving the room instants before this unilateral declaration. 

## 28 MADRID TAKES CONTROL OF CATALONIA AFTER INDEPENDENCE VOTE

Rajoy's government officially took control of Catalonia's regional government and will be in office until next elections that will take place on the 21st December. At the same time, the regional parliament was dissolved. 



# NEC RECOMMENDS

*Recommended by Filipe Berjano and Gonçalo D'Alte*

## THE ECONOMIST

OCT 7, 2017 [🔗](#)

### THE BUBBLE WITHOUT ANY FIZZ

In a long article, The Economist analyses the current paradigm of low interest rates and how it is making asset prices soar and possibly creating a new bubble in financial markets. Only twice in recorded history have valuation metrics for the stock market been at such high levels: before the 1929 crash and before the dot com bubble burst. However, this time is different: while before the bubble only manifested itself in one asset class, this time, every type of asset being valued way above its long-run average price! The key for these recent developments lies behind an unprecedented string of unconventional monetary policies that have kept world interest rates at all-time lows. [🔗](#)

SEP 13, 2017 [🔗](#)

### WHY ITALY'S TROUBLED ECONOMY IS RETURNING TO FORM

The Italian economy is experiencing an unexpected strong recovery. The unemployment rate fell by 0.4 percentage points during the second quarter to 11.2%. Along with this, government statisticians announced a 4.4% year-on-year rise in industrial output. Although Italy's GDP growth of 1.5% still lacks behind the euro zone average of 2.2%, the gap has been narrowing. Is Italy getting back at its feet? Structural inefficiencies persist. Economists agree that Italy is benefiting from the upswing of the rest of the European countries. A state bailout of Italy's oldest bank in July and the rescue of two lenders have stabilized the financial sector. [🔗](#)



SEP 5, 2017 [🔗](#)

### HOW AUSTRALIA BROKE THE RECORD FOR ECONOMIC GROWTH

Figures show that Australia is the country with the longest period of economic growth in modern times. It surpassed the previous leader, the Netherlands, which has suffered from two consecutive quarters of contraction. Australia's success reflects its effective structural reforms which were taken in the 1980's and 90's. Floating currency and stabilized inflation contributed for the improvement of government finances. When the global financial crisis hit, Australia had over a decade of budget surpluses and did not have net debt. [🔗](#)

**FINANCIAL TIMES**

SEP 20, 2017 [🔗](#)

**GLOBAL ECONOMY IMPROVING BUT LACKS 'SELF-SUSTAINING UPSWING'**

The organization for Economic Cooperation and Development believes that despite economic performance improvements for most of the world's leading economies, economies are still short of self-sustaining upswing. The organization emphasizes the need of more private investment for the expansion to continue, wages to rise and to tackle inequalities. Catherine Mann, OECD's chief economist, stated that sustained medium-term global growth is still not secured. [🔗](#)

SEP 25, 2017 [🔗](#)

**EUROZONE GROWTH TO EXCEED HISTORIC AVERAGE – DRAGHI**

The president of the European Central Bank (ECB), Mario Draghi, gave a bullish assessment on eurozone's recovery, stating that growth in the region would outpace its historical average. The Euro area had already 17 consecutive quarters of growth and is expected to continue in the next period, said Mr Draghi at an European Parliament hearing. The president also referred that unemployment rates reached an eight-year low. Policymakers at the ECB are starting to rethink their extraordinary monetary stimulus. [🔗](#)

**BLOOMBERG**

OCT 19, 2017 [🔗](#)

**TAYLOR AND HIS RULE ARE NOT WHAT THE FED NEEDS**

Bloomberg's Noah Smith explains the flaws of the famous Taylor rule and why its creator's predictions about inflation were wrong. John Taylor's famous rule effectively revolutionized monetary economics as it successfully predicted the behavior of central banks for decades. However, Professor Taylor's *magnus opus* has been criticized for suggesting a much higher rate of Fed Funds in a time where ultra-low interest rates have not spurred high inflation and a steep hike could harm economic recovery. [🔗](#)



**THE REFORMED BROKER**

OCT 16, 2017 [🔗](#)

**JUST OWN THE DAMN ROBOTS**

A dark but insightful essay on robots, labor and retirement by Joshua M. Brown on the blog "The Reformed Broker". Mr. Brown tells the story about how the concept of retirement came about and how the rise of robots will change not only labor but also what we will do after we stop working. Since robots will eventually substitute labor, no longer do we invest for retirement, we invest in order to prepare for our imminent replacement for a robot. [🔗](#)

**CREDIT WRITEDOWNS**

OCT 16, 2017 [🔗](#)

**CRONY CAPITALISM AND REDISTRIBUTION**

An interesting article by Edward Harrison on the blog "Credit Writedowns Pro" on how anti-competitive behavior by big corporations undermines capitalism. Current capitalists and entrepreneurs dislike competition and they make all efforts in gaining a protected position in the market. They would rather invest in competition barriers (even if that implies some sort of corruption) than in innovation and production capacity. This is effectively killing capitalism. [🔗](#)

# OLIVIER BLANCHARD

*Interview conducted by Robin Bohn and Beatriz Braz*

**F**ORMER CHIEF ECONOMIST AT THE INTERNATIONAL MONETARY FUND, Olivier Blanchard came to Portugal for a conference and Nova Economics Club took the chance to interview him.

Olivier Blanchard is known by his publications in the field of Macroeconomics and despite being a French citizen, he has spent most of his professional life in Cambridge. Ph. D in Economics from MIT, Blanchard now teaches Economics there, after having taught at Harvard University.

Not only in his academic life, but also in the International Monetary Fund, Blanchard stood out. During his tenure as Chief Economist he advocated for global fiscal stimulus during the Great Recession, but faced with the slow recovery afterward, we switched support to quantitative easing. Therefore, Olivier Blanchard had an important role in the follow-up of the recent crisis.

He is in this edition to share with all the readers his personal views on the path he advises for a young economist and for Europe to surpass the leftovers of the Sovereign Debt Crisis the countries seem to be recovering from.



**ROBIN:** What type of advices would you give for young economists, nowadays?

**OLIVIER BLANCHARD:** Take all the courses and get A (laughs). But in terms of research, I can only say what excites me: it's to not being obsessed by the internal dynamics of a profession. I don't think a way to write the thesis is to say, "I sort did that and I'm going to put this twist". It's much better to say: "Well, this problem exists in the world, how do I basically write a model and fix it?" So, it's starting from the facts and then going back. Too much of the research is "I'm going to add some friction to some model and see what happens. Then, you have to make sure that you improve your technical skills because, unfortunately, this is part of what is going to be assessed. On the other hand, try to look to papers like the one presented today; try to have some ideas of what type of models you want to look at, regressions you want to understand. It's much more fun to start from reality and then go back.





“

**It's  
much  
more**

**fun to start from  
reality and then  
go back.**



“I think it can be explained to Germany that what we want from them is not more inflation, but it’s the relative prices adjustment in the form of an increase in prices.”

## The Euro Zone may benefit from high inflation and the Euro crisis could finally be over

**ROBIN:** You focused a lot on Non-performing loans – NPLs. How could Portugal address this issue without violating the new loans regulation and without sending shocks to the financial system?

**OLIVIER BLANCHARD:** Everybody knows that there are NPLs. It’s not something that people are going to wake up and say “Oh! NPLs?”. However you are absolutely right, these rules on this stage job are too constraining, and so I think pressure can be put by the ECB

on the banks to actually deal with the NPLs. Then, the question is capitalization. I think that in most cases they can probably fine provide capital now because you can see some cases: Spanish Banks can do it, lone star if buys no loan bank can do it. But, provide capital in some of them there are issues from the resolution rules. I think the Portuguese government has to look to Brussels and argue.

**ROBIN:** You mentioned that Portugal could benefit from high inflation and the Euro Zone when Portugal has no power to do so. You talked about that up a need high inflation in Germany and in general North European Countries. How could this be achieved? How can this be solved by the European countries?

**OLIVIER BLANCHARD:** I think that Germany has to understand that if they don’t have high inflation, it makes it difficult for other European countries to adjust. Making it hard to adjust means that populism will be more popular and eventually things then go and then back. I think it can be explained



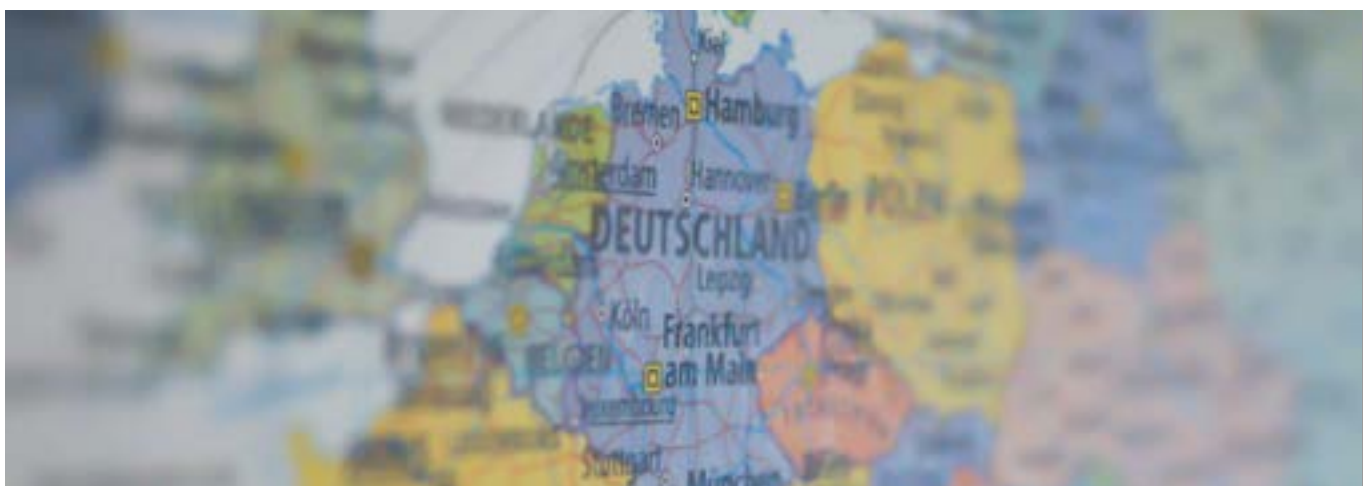
The Euro crisis shall finally be over, with the exception of Greece. “I’m not sure what will happen to Greece, even if something happens to it, like the Euro exit.”

to Germany that what we want from them is not more inflation, but it’s the relative prices adjustment in the form of an increase in prices. But this is not the beginning of a high pay inflation of the 20’s. They have to understand in this stage why the exchange rate will have higher prices in Germany, which will make the Germans richer and another way to explain to them is to count the surplus. Their lending is a result from the rest of the world. They

should be investing in real good German firms rather than lending to “lazy” people like Portuguese, or Greek. So, I think they have to be convinced, which is not easy.

**ROBIN:** The recovery start in Portugal is on the way, as well in Spain and in Ireland. In Greece, we had the new deal strike yesterday: the strong package of reforms. Can we finally say the Euro crisis is over?

**OLIVIER BLANCHARD:** I would say yes, except for the last country that you mentioned because I’m not sure that the programme is enough to solve the competitiveness issue. So, I would say I’m not sure what will happen to Greece, even if something happens to it, like the Euro exit. I think that for the rest of the Zone countries they would remain together and it would be seen as a Greek issue, not a Euro Zone issue. However, time will tell. □



# PERPETUAL TRAGEDY

*Written by Arcida Zabel, Christian Osterhold and Robin Bohn*

## IN THE END, SUNSHINE FOLLOWS THUNDER.

Despite global challenges, recovery in the European Union is expected to continue and for the first time in almost a decade, all member states are expected to grow. Growth is forecasted at 1.8% in 2017 and 2018, inflation in the euro area is expected to increase from 0.2% in 2016 to 1.7% in 2017 and a debt-to-GDP ratio of the Euro Area is expected to diminish gradually from 91.5% to 89.2% in 2018 as public deficits decline. Is it time for a Hooray yet?

Well, despite the positive aggregate outlook, a closer look shows that prospects differ greatly between the individual Member States. And the closer look shows that, once again, it is Greece which remains in stormy weather.

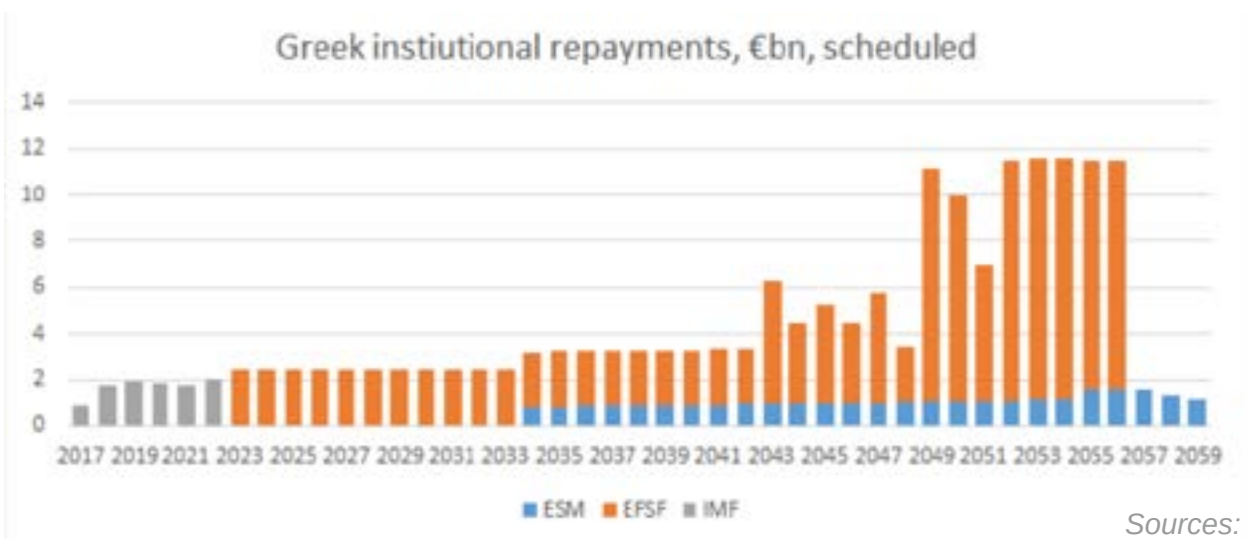
### THE NEXT BIG MOMENT TO COME IN THE GREEK TRAGEDY WILL BE THIS SUMMER.

By July, Greece will face debt repayments of about 8 €bn – an amount it cannot reasonably shoulder on its own. However, the highly-anticipated IMF involvement is conditional on the implementation of long-negotiated tax and pension reforms in Greece. With two bailouts completed and yet no end in sight, the IMF wants to protect its credibility and therefore increases pressure on Greek officials. Expected structural reforms force the ruling party “Syriza” in Athens into a dilemma, since a resistance against “one euro more” of austerity was agreed upon in 2015.

Greek officials thus find themselves in a quarrel between its major creditors, as further tranches of Greece’s overall \$86bn

3rd bailout are continuously discussed by EU finance ministers and officials from the IMF. The IMF, a major creditor in symbols rather than numbers, keeps up its call for significant debt relief for Greece on the European side, and ambitious policy reforms on the part of the Greek authorities. The major creditors in numbers, EU institutions, insist on a Greek primary surplus of astonishing 3.5 %, without any debt relief. Greece’s institutional debt, standing at 185€bn, is shared among the ESM, the EFSF (merged into the ESM in 2013) and the IMF. Whilst IMF participation is highly welcomed for expertise and political stance - IMF participation has been announced by Angela Merkel as a must-have to calm her own ranks - it’s share in the debt programme is rather small, at 5.4%. 94.6% are held by the ESM and EFSF combined.

With candidates running on straight Anti-EU tickets, Eurozone governments want to avoid making any concessions to Greece ahead of elections in Germany and France. As often before in the last 5 years, stances on both sides seemed tough and divides too big. And as often



Sources: IMF, ESM, EFSF

before, Eurozone partners could end up forging a preliminary deal on a preliminary solutions to an ongoing crisis.

Yet, there is a momentary glimpse of light. By now, Greek finance minister Euclid Tsakalotos dropped his opposition to approve tax and pensions reforms, a major IMF demand. Few weeks ago, Syriza representatives and Greece's creditors could agree on a 2€bn package on tax and pension reforms to be introduced by the end of the decade after months of negotiations. The reforms pave the way for the disbursement of 6€bn from the 3rd programme over the next couple of month – enough to support Greece most urgent finance needs for the Summer.

**IT SEEMS THAT, AS FOR THE MOMENT, EUROZONE NEGOTIATORS ARE ABLE TO KEEP THE IMF HAPPY.**

Even though partners were able to agree on further reform steps and the payment of yet another tranche, Greece's economic path boils down to future decisions of Athens ruling party and its ability to push negotiated packages through parliament. If the Syriza administration can bring up enough political capital to promote its negotiated reform agenda, EU and IMF bailout monitors predict that the reforms will help sustain the stability of public finance. If the most recent deal does not survive the parliamentary process the future looks a lot more uncertain. And time remains a pressing issue. Greece saw glimpses of recovery washed away before by the political process uncertainty. Mister Dijsselbloem made it clear: the "momentum" of recovery is "slipping away".

However, clouds have not lifted over Greece yet. With the ongoing discussion of the Tsipras government to call for early elections in Greece before 2019, finance ministers of various European countries are more likely to oppose disbursements without negotiated reforms being passed into action. For now, all sides could find a common ground to continue their work, which they spoke unusually high of. Yet, there are still hardens to take and Greeks will require further European support to be able to redeem maturing debt. Even with a success at hand, solving Greece's debt crisis remains an ongoing work. One needs to remember that the European path of smallest solutions is going on for more than half a decade. By now, it'd old enough to join primary school - and it might get around to see middle school coming its way.

Greece's obligations to its European creditors amount to 162.6€bn, not including interest payments. Even though repayment on EFSF loans were stretched further this January, Greece's financing needs for 2017 remain substantial. Including interest payments on bonds and IMF loans, Greece needs to roll over some 25€bn in debt this year only. Even though Greece could successfully place treasury bills in the last months, yields of over 7.5% make self-sustained market financing highly unlikely. To address its refinancing need, Greece would need to call upon 25€bn of support from the ESM. Total payout from the 3rd programme could thus reach up to 56€bn this year. Despite short-term successes, the long-term outlook remains unclear as rumours about a needed 4th bailout for Greece have emerged,

put forward by former Greek finance minister George Papaconstantinou.

However, not all is dark and sunshine eventually follows thunder.

Klaus Regling, head of the European Stability Mechanism, stated that Greece's finances were improving faster than expected and it might need less than the maximum loan of 86bn € by August 2017. The IMF projects Greece to achieve a primary surplus of 1 % in 2017 and 1.5 % in the medium run. As European repayment schedules only start in 2023 (and much of it beyond) it seems not unlikely that Greece might at least suffice to serve its interest payments over the next years on its own, set to be around 1.5€bn this year and around 2€bn for the upcoming two years.

Given stretch repayments - and if the IMF'S growth projection of 2.7 % for 2017 and 2.3 % in the mid-term hold - there is the chance that Greece sets on a slow way to reduce its debt-to-GDP burden. However, this is a path that will take a generation – if not more. That said, it's clear that stormy weather hasn't left the Aegean yet. But in the end, sunshine follows thunder. 

*Disclaimer: this article was written before the elections in France. Data retrieved from the 2017 forecast from the European Commission.*



# ECONOMICS OF WATER

## SUPPLY, DEMAND AND IMPLICATIONS FOR POLICY

*Written by Ana Faria*

Climate change is a phenomenon which impacts various regions of the planet affecting their ecosystems, their economy, human health and hence, society as a whole. It has influenced land and sea temperatures, precipitation patterns and the likelihood of extreme weather events. Most of the impacts of climate change are channeled through the water cycle through water-related extreme weather events (like floods and droughts) and changing precipitation patterns, for example.

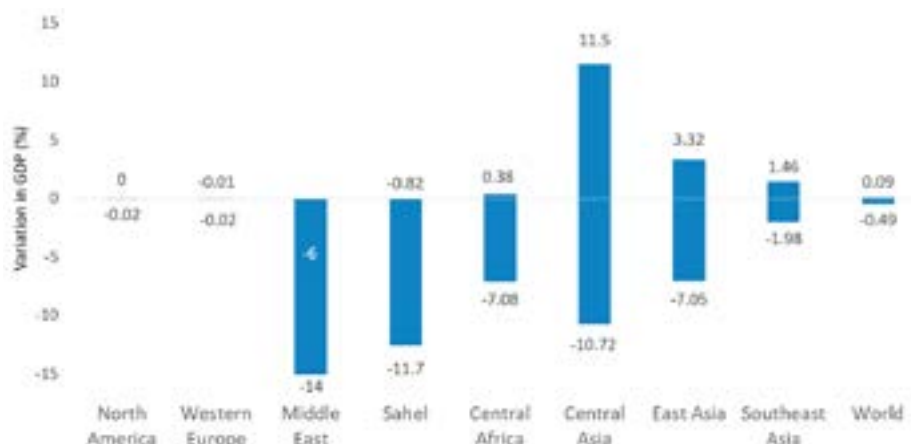
On the one hand, future trends of growing population, prosperity, increases in income and the expansion of cities will increase the demand for water across all sectors of the economy in the future. In fact, studies suggest that, within the next thirty years, the demand for water will increase 40% to 50% in the food system and 85% in the energy sector, while the demand for municipal and industrial water is expected to increase 50% to 70%.

On the other hand, supply will remain unchanged and more variable as a result of more variable and less predictable rainfall and of water-related shocks, a report from the World Bank states. Even though the total volume of runoff is expected to be stable, its distribution across the globe will be uneven and so, water scarcity will increase in regions where the demand for water already exceeds its availability (Middle East, North Africa, Central Asia, and Central America – 60% of world population), while other regions of the globe will experience excess supply of water. Given that water is a resource with a

low value-to-bulk ratio, its transportation from regions where water is abundant to regions where it is scarce would be very expensive and economically inviable. As such, the management of water resources will become increasingly more complex, as local changes can impact the rest of the world through production and its efficiency, changes in comparative advantages and water usage.

By looking at the figure below, one can understand the projected impacts of these changes on GDP, where the lower bounds represent a “business-as-usual” scenario and the upper bounds depict a scenario in which water is used and allocated in a more efficient manner. The impact of policy decisions and better water management result in higher growth rates than in the scenario where there are no policy changes and, moreover, in most regions, losses driven by water challenges even disappear.

But water challenges will impact the poor not only through GDP, but also through



The figure shows the possible variations in GDP, resulting from climate change effects on water. It considers different policy scenarios, where the upper bounds depict policies that encourage better water allocation and the lower bounds represent “business-as-usual” policies.

Source: World Bank



**EVEN CONSIDERING A FAVORABLE SCENARIO, SOME REGIONS (SAHEL AND THE MIDDLE EAST) STILL EXPERIENCE A DECLINE IN GDP GROWTH RATES, AFFECTING POVERTY ALLEVIATION.**



natural disasters, health and agriculture, since rainfall variability negatively affects crop yields and leads to increases in food prices. It is also expected to impact human capital, since rainfall shocks affect income of families that rely on agriculture, livestock or aquaculture (78% of world's poor), leading reductions on human capital investment, especially in children, reducing future employment and wage prospects, perpetuating the cycle of poverty.

It is in this context that

policies are needed to tackle the increased demand for water and water supply, policies that will be particularly important in the determination of growth paths. In order to increase the supply of water, there are opportunities such as wastewater recycling, especially in large cities, and desalination, opportunities that require research to scale up technologies that improve their viability. However, these investments must be combined with policies on the demand side that will promote a more

efficient use and better allocation of water resources. These include allocation through tradeable water permits; pricing (introducing higher municipal water prices, together with target subsidies or block tariffs to ensure access by the most vulnerable in order to reduce municipal water demand and incentivize the reduction of wastage); incentives to both the creation and adoption of water saving technologies; and the promotion of changes in consumption patterns through education and behavioral nudges (using social norms, for example).



Sources of data:  
 "Charting our Water Future" Report by McKinsey & Company   
 "High and Dry: Climate Change, Water, and the Economy" Report by The World Bank 

# A LOOK AT U.S. AVIATION INDUSTRY

*Written by Mariana Pires*

Some of the main U.S. airlines have recently been under pressure due to accusations of violence against their customers. The latest news about a man being dragged out of an overbooked flight has raised questions about the polemic strategy behind this unfortunate event, which is commonly known as overbooking. This consists in overselling tickets in order to fill in seats of people that buy the tickets and do not board the plane.

The problem with this practice has to do with situations in which everyone shows up and there are not enough seats available. The flight attendants have instructions, in these situations, to try to find volunteers to give up on their seats, offering different types of rewards, from money to travel vouchers. Still, often people have somewhere else to be and no volunteers are found. In these cases, the next step is the one that is causing the unfortunate events reported in the news, which is selecting randomly people to leave the plane.

Despite the controversy, overbooking is one of the factors that help explaining the high revenues of airlines in the U.S., namely American Airlines, that is estimated to surpass \$40 billion in annual revenues. Indeed, this strategy allows companies to maximize their revenues and consequently profits by avoiding inefficiency, in the use of resources, as a consequence of seats being left unoccupied. Experts that present overbooking as the golden rule to succeed in this industry, also point out that without this measure airlines would be forced to charge higher fares, which would mean bad news for U.S. customers, since air fares per seat mile are already higher than in Europe. In fact, the airlines in the U.S. benefit from lack of competition, mainly as a result of past mergers and high entry costs, being this last one an important barrier to entry in this industry. This makes it possible for the airlines to charge higher fares, as a way of covering increases in costs, such as jet fuel (one the main costs of airlines).

## DOES THE LACK OF COMPETITION CAUSE PROBLEMS?

If we look closer into this industry, it is possible to see significant differences between the aviation industry in the U.S. and Europe. For example, in the U.S. the leading four carrier's companies represent nowadays, around 80% of the market, whereas in Europe, the top four carriers control only 45% of the market.

The U.S. aviation industry has a long history of mergers. The merger between the AMR Corporation and the U.S. Airways Group is one for the books, since it gave rise to one of the largest airlines in the world: American Airlines Group. Back to 2012, when the merger was in discussion, the AMR Corporation hold 12.9% of market share and U.S. Airways Group had control over 8.1% of the market. Therefore, together they would take over 21% of the market.





As expected there were lawsuits that tried to block the merger by presenting as arguments the substantial decrease of competition and the possibility of a raise in fares. However, nothing stopped it and nowadays the airline employs more than 100,000 people and is responsible for an average of nearly 6,700 flights daily.

In terms of profits per passenger, there is a clear discrepancy: airlines in North America registered an estimated profit of \$22.40 per passenger, in 2016, while European airlines were left with an estimated profit of \$7.84 per passenger.

Despite the profit figures being in favour of North American airlines, when it comes to rankings, European airlines are at the top, among Asian Airlines (often taken as reference). Virgin America is the best ranked North American airline, according to the ranking of Skytrax for 2016, showing up at 25th place.

**SHOULD EUROPEAN AIRLINES ADOPT THESE STRATEGIES?**

In the European aviation industry, some important mergers have already taken place, namely between Lufthansa and Swiss International Air Lines (SWISS).

Nevertheless, in Europe, the airlines do not benefit from the same strategic advantages as the airlines in the U.S. Indeed, it is important to underline the intervention of the European Competition Authorities to prevent actions, that would put at risk the settled minimum level of competition for this industry and consumer's interests. Thus, this intervention has allowed to preserve competition in the European aviation industry.

The lack of quality and efficiency of the service provided by airlines in U.S. show how crucial competition is in the aviation industry. For that reason, the important

question is not whether the European airlines should follow the steps of U.S. airlines, but rather how long will it take the U.S. Department of Justice Antitrust Division and Federal Trade Commission to realize their mistake in letting mergers among airlines significantly decrease competition in this industry. ■

*Skytrax is the international aviation consultant responsible for airline and airport review and ranking site. The Federal Trade Commission is the U.S. competition regulator.*



# MOVE OVER UK: PORTUGAL IS READY TO TAKE OVER AS THE NEW HOST OF THE EMA

*Turmoil caused by Mariana Pires and Daniel Hu*

## Is it possible?

After the British referendum, the British people decided to put an end to their long-lasting relationship with the European Union (EU). Since then, experts are trying to forecast the effects of this decision on both the UK and EU.

Although the impact of the Brexit in many sectors is still unknown, one thing is certain: London can no longer be the headquarters of main European institutions, namely the European Medicines Agency (EMA). Consequently, there are already many state members showing their interest in being the new home for the European regulator, including Portugal. A major issue resulting from this reallocation of headquarters is the fact that EMA employs approximately 900 professionals at its London base, so many of the staff would have to be reallocated as well.

Therefore, Portugal's bid will most likely focus on highlighting its high level of security, great weather, and strategic geographical position to accommodate the EMA staff. Moreover, the existence of highly qualified labour force is also a factor to consider, as they may become potential future staff. Additionally, and possibly Portugal's best argument, is the reputation of INFARMED, the country's national medicines regulator.

Among the candidates, the main competitor should be Spain, which is proposing the Torre Agbar, located in Barcelona, as the headquarters facility and claiming it is the best immediate solution to the problem.



## Why does it matter?

Regardless of the chosen country, the new host of EMA will benefit from a prestigious position as the centre of the European pharmaceutical industry, which will allow the country to attract investment to its scientific research and development sector, while significantly boosting the country's healthcare sector.

In the case of Portugal, reallocating the headquarters of EMA to Lisbon would mean a reinforcement of Portugal's strategic role in the EU activities.

In fact, Portugal is already the current home to European Maritime Safety Agency (EMSA) and European Monitoring Centre for Drugs and Drug Addiction (EMCDDA).

By also becoming the host of the EMA, Portugal would surely become a more impactful element of the EU structure. ■

# HAS THE BOLIVARIAN REVOLUTION FAILED IN VENEZUELA?

*Turmoil caused by Diogo Firme and Gonçalo Mendes*

## Could it happen?

It is almost impossible not to notice the colossal revolutions that have been underway in Venezuela over the present year. This country was once regarded as the richest country in South America, due to its oil reserves. According to the Organization of the Petroleum Exporting Countries (OPEC), Venezuela has the largest oil reserves in the world, accounting for almost 25% of the total oil reserves. The same country, however, is now crumbling.

In the first place, let us not forget the major event that shaped Venezuela almost thirty years ago, and how bluntly its ideas have gradually been put aside over the years: the Bolivarian Revolution. This was led by former President Hugo Chávez and was named after Simón Bolívar, who had fought for the independence of the country in the nineteenth century. Guided by a socialist set of ideals, its major goals were to create a country with a self-sufficient economy, to build a participative democracy, to create a more equal wealth distribution and to fight corruption.

After almost twenty years with this regime, the image we have is a very different one. This utopian plan was not only not achieved, but it was totally reversed, with every single one of its goals thrown to the trash: the economy now has huge deficits, there is no clear democracy, wealth is far from being equally distributed and corruption has been skyrocketing over the years.

However, troubles do not end here: in the beginning of the present year, the country was facing an inflation rate of 800%, the highest inflation rate, according to the International Monetary Fund. Also, the Gross Domestic Product shrunk by 18.6% in the last year. By late December in 2016, the Venezuelan currency, the Bolívar, had already lost 55% of its value. The government has also implemented some counterproductive measures, such as forcing producers to

sell at a certain price, even though they would face severe losses. This has led to many giving up, lower supply of goods and an upsurge in prices. This fermented a humanitarian crisis with food becoming scarcer, electricity and water supplies deteriorating and thus aggravating poverty and criminality.

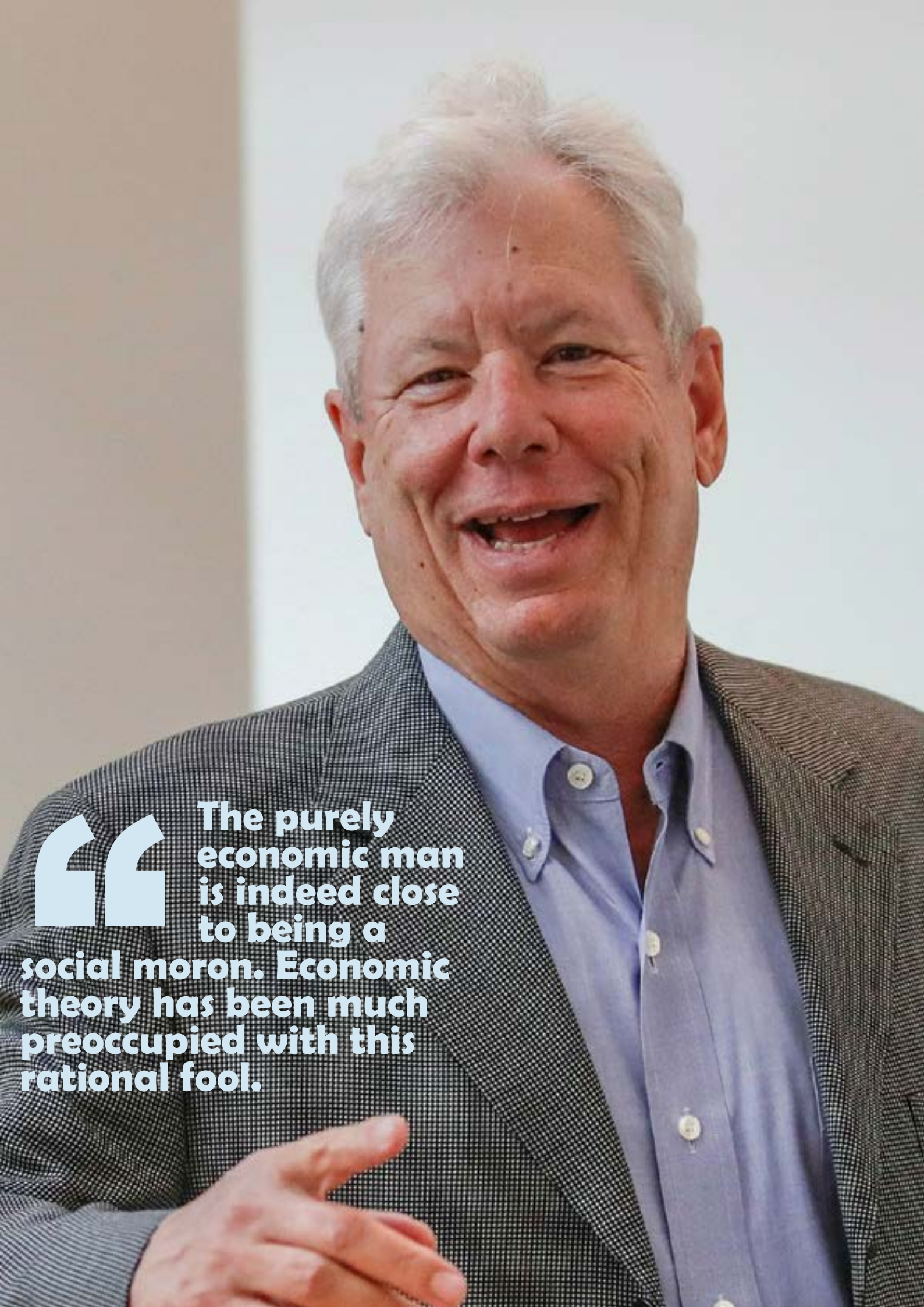
One reason for these developments are the economic policies that have been followed over the years. President Maduro has not changed most of Chávez' policies, which were financed by the revenues from oil extraction. With the oil prices plunging in recent years, we now see Venezuela falling alongside. This shows that economic policies were not strong in content, but rather dependent on the revenues of oil exploitation.

## What are the consequences?

Due to a series of bad political decisions with the intent to revert the situation, Venezuela has turned into a complete chaos.

This has brought a series of uprisings with many casualties and arrests, which have flooded the press over the present year. The country has been on the brink of a civil war as President Maduro insists on maintaining his unsuccessful policies. The percentage of people who live under the poverty threshold has risen to a worrying 80%.

Bearing in mind all these problems, we have reached three likely scenarios: President Maduro being withdrawn from power, which, in the worst-case scenario, could cause even more instability, if the country falls into a cycle of disorder. If the government wins and the same policies are carried out, we will continue to see this country turn into a living hell. The third – and by far the most utopian – is that, independently of who stays in power, the correct measures will be taken, in order to revert the present situation, and once and for all bring prosperity to Venezuela. ■



**“ The purely economic man is indeed close to being a social moron. Economic theory has been much preoccupied with this rational fool.**

# RICHARD THALER

*Highlighted by Paul-Leonard Gloeckner*

On the 9th of October 2017, Richard H. Thaler was awarded the **NOBEL PRIZE IN ECONOMICS** for his outstanding contributions to behavioural economics. The American economist currently teaches at the University of Chicago Booth School of Business and is well-known for his work in behavioral finance.

Throughout the last decades, many economists have built complex theoretical and mathematical models to determine resource allocations and prices in markets. Even though abstracting from reality may be necessary in some cases, much criticism – from inside and outside the economic science – is attributed to the many unrealistic assumptions, which are underlying most economic models today. In the past, Thaler has often criticized that mainstream economics continues to assume that people function like computers – that is, to be fully rational, to be free of emotions and to be in full self-control.

Driven by his motivation to enrich economic analysis, Thaler has taken his criticism as a starting point for his research to explore economic decision-making under more realistic assumption. This includes the analysis of the impact of limited rationality, social preferences and different levels of self-control. In his research, Thaler found that relaxing these rigid assumptions may lead to substantially different market outcomes and decision-making. Instead of invoking that human behaviour is unpredictable, he showed that human behaviour can be modelled because it deviates from rational behaviour in specific patterns. Thanks to his work, economists and policymakers have started to attribute a greater importance and attention to human behaviour.

Before receiving the Nobel Prize, Thaler has worked with other behavior economist such as Amos Tversky and Daniel Kahneman who have also provided many empirical evidence that individuals repeatedly make irrational choices and are subject to cognitive biases, which undermine their economic interests. Kahneman went on to win the Nobel Prize in 2002.

In his book “Nudge: Improving Decisions about Health, Wealth, and Happiness”, which was published in 2008, the Nobel Prize Laureate summarizes his insights from years of research

in psychology and behavioural economics. Nudge – another term for “to push” – has far reaching implications for public policy. For instance, low participation rates in governmental programs such as retirement savings plans or lunch programs at school are observed in real life. Thaler’s research suggests that this is a consequence of people tending to stick with their default options. To increase participation rates in these programs, governments and employers should make participation the default option. Of course, people remain free to drop out but are less likely to do so. Hence, Thaler urges policymakers to push people on the side of the preferred outcome, if they want to program to be successful.

Thaler’s work on fairness has provided also many new insights. He showed individuals tend to penalize unfair behaviour without gaining direct benefits from it. For example, the perception of fairness by consumers in the market plays a major role and can actually prevent firms from increasing prices during periods of excess demand. Moreover, Thaler has also taken the beloved dictator game in economic experiments and shown that different levels of fairness can constrain the profit-seeking activities by individuals.

The American economist has done major advances in the work on limited rationality. His theory of mental accounting postulates that individuals create separate accounts in their minds for each decision they make. They thereby tend to concentrate on the small impact of each decision, instead of taking the overall effects into account. In addition, Thaler explains that loss aversion is a reason why individuals value things more highly when they own them than when they do not – a phenomenon which has been coined as endowment effect.

Richard Thaler’s work on behavioral economics has massively contributed to the advance in conciliating real-life decision-making with economic theory. His empirical insights lay the groundwork for further research in the field of behavioral economics. The Nobel Prize can be regarded as a recognition of the importance of behavioral economics in economic research and economic policy-making. This hopefully ends the times where behavioral economics was on the brink and places it on the same level with other fields in economics. ■

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