# On The Margin

a newsletter of the **C**atholic **R**esearch **E**conomists **D**iscussion **O**rganization

Volume 2 Issue 2
Fall 2015





www.credo-economists.org


## CREDO Welcomes Hale as New Board Member

CREDO's second Executive Board was elected earlier this month, and Galina Hale was elected as a new member. Galina is a Research Advisor in Risk Modeling Research at the Federal Reserve Bank of San Francisco, and her research focuses on international finance, international banking, and capital flows.

Hale joined CREDO in 2014 and was named to the Advisory Panel. She has been an active member of the society, attending both the annual meeting in Boston, and the Lumen Christi Institute conference in Chicago this past year.

"When I heard about CREDO, I was eager to join, since it links together two very important parts of my life and provides ways to apply my skills more directly towards goals well aligned with Catholic teachings. I am happy to join the Board so that I can work more closely with like-minded economists and contribute to the success of this amazing organization," Hale explained.

Hale has had quite an interesting journey to the United States and Catholicism. She was born in Moscow in the USSR and was raised agnostic. She received a bachelor's degree in math economics from the Moscow State University and a master's degree from the New Economic School in Moscow.

Hale moved to the U.S. in order to attend the Ph.D. program in Berkeley. While in Berkeley, she married and had a son, and started attending weekly mass with her husband and son. She graduated from Berkeley in 2002 and moved to teach at Yale. She returned to the San Francisco Bay Area in 2005, visiting Stanford and Berkeley before later starting at the San Francisco Fed. She began attending a Jesuit parish in the San Francisco area, and became a Catholic.

"I became interested in joining the church and was baptized in 2008 - largely thanks to the priests and the community of the parish."

Hale replace Bill Evans of the University of Notre Dame, who served on the Executive Board for its first two years. The other Board members and offices remain the same.

this issue

# Past Successes and Future Goals for CREDO

**It has now been two years since the founding of CREDO, and what a successful two years it has been.**

1. We continue to grow. Membership has increased over 20 percent during the past year, and we now have over 300 members.
2. We had our first elections and have established our second Executive Board, as covered on the front page.
3. Our third annual meeting will take place at the ASSA meetings in San Francisco, and we are delighted that Archbishop Cordileone will be able to join us for a Mass and breakfast on Monday, January 4.
4. We are expanding our activities. We are planning on having a 3-day summer camp this summer for graduate students and faculty interested in learning more about Catholic social teaching and engaging more in the conversations with the Church and economics
5. Pope Francis released the first social encyclical, since CREDO was founded Several well-informed members have written reactions to the encyclical *Laudato Si"* in this issue.
6. CREDO board member Valerie Ramey is taking the lead in organizing the program for the Lumen Christi Institute's 8th annual conference on economics and Catholic social thought. This one will focus on the the environment, environmental economics, and *Laudato Si'*.
7. Pope Francis visit to the United States created a media sensation, and much of it dealt with his views on the economy. Several CREDO members were interviewed by the media or wrote commentaries (e.g., Andrew Abela, Michael Brennan, Fr. Paul McNelis, Tim Kane), etc. As an organization, CREDO doesn't promote any particular economic views, but there was a lot of media sensationalism in the coverage, and I was happy to see CREDO members doing their part to clear things up. (I myself had an unfortunate situation where CNBC requested a commentary from me, *then changed my words – adding entire paragraphs before publishing – without telling me!* It's hard to say you were misquoted in an editorial that you wrote, but this is exactly what happened.)
8. We have established an international presence with members from institutions in 23 countries: Argentina, Austria, Australia, Brazil, Canada, Chile, Croatia, Germany, Hungary, Ireland, Italy, Jamaica, Japan, Mexico, Portugal, Romania, South Korea, Singapore, Spain, Switzerland, Trinidad and Tobago, the U.K, and the U.S. Our membership is even more international if we consider country of origin.

Joseph Kaboski
*David F. and Erin M. Seng Foundation Professor of Economics, University of Notre Dame*

**Here are some goals for the next two years:**

1. Expand our membership, especially our international presence. There is clearly room to grow in all countries, but right now over 75 percent of members are at U.S. institutions. We would look forward to eventually sponsoring meetings or other activities outside the U.S., publishing more newsletter contributions from people outside the U.S., etc. This of course depends on your initiative in spreading the word about CREDO to economists and church communities outside of the U.S.
2. We need to identify a bishop for our Episcopal Moderator position, the ecclesial term for a Bishop Advisor, which was left vacant. Cardinal George was a great promoter of the conversations between economics and the Church through his support of the Lumen Christi Institute conferences. His death was not only a personal loss, but a tangible loss to CREDO as an organization.
3. Related to both of the above goals, we have contacts with the U.S. Bishops conference, but we would like to establish contacts with Church leaders in other countries, and and strengthen contacts with the Vatican.
4. Strengthen our relationships with media outlets and Catholic organizations. We would like to improve the quality of information and discussion on matters of economics and ethics by having CREDO members the go to resource for these types of questions. (These have the snowball effect of network economies, so mentioning CREDO if you give an interview or write a commentary is helpful.)
5. Establish non-profit status and raise funds for additional activities. The ASSA breakfasts are unfortunately quite expensive. If we can raise funds, we may be able to sponsor a summer conference open to our entire membership.
6. Expand CREDO's participation in social media. We have a Facebook page, but it is not very active. We do not even have a twitter account. Nor do we have a blog. If there were a way of simply sharing information and article relevant to CREDO conversations, that would be helpful.

These goals are bold. They will certainly require help, bot divine and mundane. If you can assist in any of these, please let us know by sending an email to contact@credo-economists.org.

Our upcoming events include a Mass and annual meeting/breakfast at the ASSA conference on January 4, 2016, in San Francisco, and the Lumen Christi Institute's conference on May 19-20, 2016 in Chicago. The focus of the conference will follow up on *Laudato Si"* and discuss the economic and ethical implications of environmental problems. As in the past, the first day is a public event, but the second day is small group conference.

***Joe Kaboski***
***President of CREDO***

# THE ENVIRONMENT AND THE EMERGING GLOBAL COMMON GOOD

Who is my brother, who is my sister in a globalized era? For Catholic faith, the answer to this searing question that Pope Francis has unceasingly raised is rooted powerfully in the notion of the common good. Every human society, ranging from the family to neighborhoods to unions to social organizations to the city, state and nation, has an identifiable common good. The common good for each of these human societies is "the sum total of social conditions which allow people, either as groups or as individuals, to reach their fulfillment more fully and more easily." The common good includes respect for the individual person as such, but also requires regard for the development of the group itself. In addition, the common good requires peace and just relations within the each society. In Catholic teaching the political community is the most complete realization of the common good, but the state is designed to defend and promote the common good of civil society as a whole and its intermediary institutions, not simply to promote the state itself.

The Catechism of the Catholic Church, echoing the words of the Second Vatican council, emphasized that 'the common good is always oriented towards the progress of persons. The order of things must be subordinate to the order of persons, and not the other way around. This order is founded on truth, built up in justice, and animated by love."

In a very real way Catholic teaching on a global common good was first fully presented by Pope John XXIII in *Pacem in Terris* in 1961. Writing that the post-war world faced enormous interwoven problems and challenges that were of their very nature beyond the ability of any state to meet, Saint John declared that a true international common good did indeed exist, and that it had a moral identity as profound as the moral identity of the common good of the nation state or any of the subsidiary elements of civil society. *Pacem in Terris* listed a series of challenges to peace and justice that pertained directly to the entire human family and that necessarily formed essential elements to address through the pursuit of a truly global common good. Moreover, the encyclical stated that this global common good necessitated a global public authority of a type not yet realized, a public authority with the capacity to institutionalize global efforts to realize the core elements of the universal common good. "Today the universal common good poses problems of worldwide dimensions, which cannot be adequately tackled or solved except by the efforts of public authority endowed with a wideness of powers, structure and means of the same proportions; that is a public authority which is in a position to operate in an effective manner on a world-wide basis. The moral order, itself, therefore, demands that such a form of public authority be established."

Saint John declared that a true international common good did indeed exist, and that it had a moral identity as profound as the moral identity of the nation state

It is crucial to recognize that in calling for the creation of an international public authority with the power to address the universal common good, Pope John made clear that this international authority must recognize in its structure, purview and actions the principle of subsidiarity in Catholic social teaching. This principle declares that in society all higher order structures and institutions must support lower level social and governmental institutions so that they can exercise their proper social functions. *Pacem in Terris* makes clear its application of this principle to the vision of an international public authority: "moreover, just as it is necessary in each state that relations which the public authority has with its citizens, families and intermediate associations be controlled and regulated by the principle of subsidiarity, so it is equally necessary that the relationships which exist between the world-wide public authority and the public authority of individual nations be governed by the same principle. This means that the world-wide public authority must tackle and solve problems of an economic, social, political or cultural character which are posed by the universal common good. Such a notion of the complementarity of the nation state and supra-national structures does not undermine the rightful scope or identity of the nation, but instead recognizes to the nation's capacities and its limitations in advancing human integral development, the environment and peace.

*Continued on Page 7*

The Most Rev. Robert W. McElroy
*Bishop of San Diego*

# Four Economists Respond to Laudato Si'

## Mary Hirschfeld

In *Laudato Si'*, Pope Francis poses a significant challenge to economics. It is not so much that he undervalues the good that markets can do, though he does. It is that the economic way of thinking is an exemplar of the "technocratic paradigm" that he subjects to scathing critique.

In LS 101, Francis writes "It would hardly be helpful to describe symptoms without acknowledging the human origins of the ecological crisis. A certain way of understanding human life and activity has gone awry, to the serious detriment of the world around us…At this stage, I propose that we focus on the dominant technocratic paradigm and the place of human beings and human action in the world."

So what is this "technocratic paradigm" that is so problematic? We can begin with what it is *not*: technology itself. In the very next paragraph, Francis extols technology: "Technology has remedied countless evils which used to harm and limit human beings. How can we not feel gratitude and appreciation for this progress, especially in the fields of medicine, engineering and communications?

Nor is it just a matter of arguing that technology is a double-edged sword. It is often used for good, but it is also used for evil. The pope reminds us that an increase in power should not be confused with progress itself, insofar as progress requires that technology be well deployed (105). But in referring to the "technocratic paradigm" he is referring to a deeper, subtler problem than the misuse of technology:

> The basic problem goes even deeper: it is the way that humanity has taken up technology and its development *according to an undifferentiated and one-dimensional paradigm*. This paradigm exalts the concept of a subject who, using logical and rational procedures, progressively approaches and gains control over an external object. This subject makes every effort to establish the scientific and experimental method, which in itself

*Continued on Page 8*

---

## Francisco Buera

A strong call to care for the poor and our common environment was made by Pope Francis in the recent Encyclical *Laudato Si'*. The encyclical guide us to reflect about these pressing problems from the richness of the Gospel. In addition, the document offers a review of the current knowledge about the causes and possible solutions to these problems. This review ranges from the science of climate change to the economic policies that could improve or worsen these problems. In this short notes, I will try to offer a reflection on one of economic policy themes that is discussed in the Encyclical: The (un)desirability of using market-based solutions to environmental problems.

The economics of the environment is special in many ways. Externalities are central to environmental problems. My consumption of fossil fuels affects negatively the utility of individuals around me, and more broadly, it affects the climate of individuals globally. The consumption of various environmental goods, e.g., the air, water in aquifers, marine life, is not easily excludable, and therefore, it is hard to charge individual consumers or firms for their use of these resources. These special features lead to two natural questions. Are special ethical considerations that individuals need to take into account when evaluating their consumption of environmentally sensitive goods? The Encyclical makes a strong case that the environmental challenges require a particular strong ethical response. Does the prominent role of externalities and non-excludable goods imply that market-based approaches are not desirable? In my reading of it, many parts of *Laudato Si'* suggest that market-based responses to these challenges should be avoided.

For instance, when discussing the "issue of water", we are warned that "[e}ven as the quality of available water is constantly diminishing, in some places there is a growing tendency, despite its scarcity, to privatize this resource, turning it into a commodity subject to the laws of the market." This warning is mainly raised in connection to the need to guarantee the "access to safe drinkable water [, which] is a basic and universal human right, since it is essential to human survival and, as such, is a condition for the exercise of other human rights." But earlier it is also pointed out that the "sources of fresh water are necessary for health care, agriculture and industry."

*Continued on Page 9*

## Craig Gundersen

There has been and continues to be a great deal of excitement across the world about Pope Francis. This is, of course, found among Catholics but there is also an excitement about his papacy among non-Catholics, including among those who are often at odds with the Church. This joy and excitement was manifest during his recent trip to the U.S. In addition, his recent Encyclical, *Laudato Si'*, was warmly received in many circles, especially among, again, those who, in general, are not excited about the teachings of the Church.

There are multiple reasons to treat this Encyclical as a wonderful addition to our understanding of the world and our interactions with the world. First, it represents a clear continuation of Church teaching. This can be seen in, for example, the multiple quotations from earlier writings by Pope Benedict and Saint John Paul II with a particular emphasis, as might be expected, from the writings of St. Francis of Assisi. Probably the main new contribution of this Encyclical is that it directly addresses climate change issues. Given this continuity with previous Church teaching, it is therefore perplexing when this Encyclical is treated by some as a break in the Church's teaching on environmental issues.

Second, the environmental consequences of human actions are placed in a broader context of other actions that have negative consequences. As examples, Pope Francis speaks out against population control as a means to address climate change [50] and he draws analogies between the abortion and environmental destruction [91, 117, 120]. Let us hope that just as this *Laudato Si'*, calls us as Catholics to change our ways of thinking and acting, that it will encourage non-Catholics who are excited about this Encyclical's broader message about environmental issues to also embrace the Pope's strong statements regarding population control and abortion.

Third, the Encyclical emphasizes the central reason why we should be concerned about climate change and environmental damage is due to its potential impact on the well-being of poor persons across the world. This emphasis is warranted insofar as the impacts of climate change may be especially negative for poor persons in low-income countries both in terms of higher food prices and, for farmers and others in the agricultural sector, reductions in

*Continued on Page 10*

---

## José Miguel Sánchez

This 190 page document, addressed to all the people living in the planet, poses a huge challenge for humanity by displaying the urgent need to protect "our common home", from the serious problem of global warming.[1]

In LS, the Pope takes risks by siding with the scientific evidence that justifies the phenomenon of climate change and global warming. Since this evidence is not without controversy, to take a position involves assuming risks. Unambiguously, in numbers 23 and 24, he explains the causes and the physical impacts of the climate change phenomenon.

For economics, as a discipline, this concern is at the center of its scope since economics is the "order of the home": Oykos (home) nomos (order or law). In LS 106 states that "Human beings and material objects no longer extend a friendly hand to one another; the relationship has become confrontational. This has made it easy to accept the idea of infinite or unlimited growth, which proves so attractive to economists, financiers and experts in technology. It is based on the lie that there is an infinite supply of the earth's goods, and this leads to the planet being squeezed dry beyond every limit".

But actually, in Economics we take very seriously the existence of resource limits and the limits to growth. In fact, the concern about "administering the house" and the allocation of resources is relevant because of the fact that the goods of nature and the earth are limited and that there is not an infinite supply of these goods. This is the first building block of economics. If this wasn't the case, economics as a scientific discipline would have no reason to exist. This is why we are concerned about the opportunity costs of resources and their efficient use. There is a moral value in efficiency, precisely because scarce goods cannot be wasted with so many needs to be met.

So I don't think we as economists really feel attracted to the idea of infinite or unlimited growth. All the contrary, I believe we share the Pope's concern, which is not limited to the care of the environment. In fact, I think it would be a mistake to say that this encyclical is only about environmental care and climate change as it goes much further: it is an encyclical on climate change, poverty, inequality, exclusion and justice.

*Contined on Page 11*

In the number 139 of LS the Pope says: "When we speak of the "environment", what we really mean is a relationship existing between nature and the society which

# On the Refugee Crisis

## Kirk B. Doran

Millions of people have seen the heart-breaking photograph of 3-year old Aylan Kurdi laying, as if asleep, on a beach in Turkey, the waves gently lapping against his cheek. His death brings the question of international migration straight to our hearts. What can we do to protect people like Aylan and his family?

As Catholics we have a special duty to protect the least of these. As American Catholics, even more so. To those who have been given much, much will be expected. But what can we do? I want to suggest policies that could help people like Aylan and then discuss what the results of these policies are likely to be.

The first is to reform the United States refugee and asylum system. The system suffers from a huge backlog of applications. Both Republicans and Democrats need to work together to dramatically increase the resources for processing these applications. Recently the United States Citizenship and Immigration Services hired an additional 175 asylum officers, but with current average wait times of two years and hundreds of thousands of cases waiting to be heard, this is likely to not be enough.

Furthermore, the system suffers from quotas that are too small and adjust too slowly to deal with sudden crises as serious as the Syrian war and IS. Raising the quota from 70,000 to 100,000 per year, as Secretary Kerry recently announced, will still leave too many children like Aylan in danger. I believe we need a bigger, albeit temporary, increase.

Finally, we need to make the Church the first face that asylum seekers see when they arrive. Too much of the hard work which Catholics do to protect and befriend migrants remains behind the scenes. Pope Francis recommended that each parish in Europe take in one migrant family. These face to face encounters are what bear fruit for the Gospel, ensuring that we aren't providing merely physical bread, but the spiritual bread that leads to eternal life.

Here is what I think the likely outcomes of these policies would be. First, there will be some winners. The most important group of winners will be the refugees themselves; they will experience religious and political freedom, education and security, and a chance to pass on these gifts to their children. The second group of winners will be employers who tend to hire employees with the kind of skills the refugees have; they will have access to a larger supply of workers with these skills. The third group of winners will be consumers who tend to purchase the types of goods and services which the refugees will eventually produce. These consumers will experience a larger supply of the goods and services they desire. Finally, the fourth winner will be Jesus Christ: if, in addition to accepting more refugees, we actually suffer and live face to face with them after they arrive, then I believe we will spread the Gospel and win more souls for Heaven.

Most of all, we can invite all Americans to view accepting many refugees as a noble sacrifice.

But I also think there will be, at least in the short term, and at least in economic terms, losers. People with similar skills to new immigrants often have trouble retaining their employment and real wages. As Catholics, we have to be careful to balance our passion for moral issues with our passion for the truth. While it is theoretically *possible* that no one will ever lose from massive changes in the population of people with a specific set of skills, *possible* doesn't mean *likely*. The most careful empirical research on this subject (research that *transparently* uses the latest and most believable causal identification techniques, and that is not funded by lobbying groups on either side of the debate) tends to show that people with similar skills to new migrants have experienced negative consequences to their employment and wages for at least several years following migration, and sometimes for much longer. We therefore have a duty to propose immigration reform in a way that takes into account these likely economic losers.

**Kirk B. Doran**
*Associate Professor of Economics at the University of Notre Dame*

First, we should change the tone of the debate. Any words demeaning to low skilled workers, to high school dropouts, or to people from geographic areas experiencing heavy migration should be dropped. Many low skilled workers are rightly worried about labor market competition from low skilled refugees. Their fears are not quelled by economists' claims that the average impact of immigration on wages will

*Continued on Page 13*

probably be small; they know that

*McElroy Continued from Page 3*

## DESTROYING THE ENVIRONMENT: THIS IS OUR SIN

Catholic theology is powerfully rooted in an enduring understanding that the entire created order is a gift from God entrusted to the whole of humanity for safekeeping and stewardship. The protection of the environment in the modern era is uniquely vulnerable to risks that lie beyond the borders of any nation to contain. Thus it is no surprise that the church identifies the care of the environment as one of the central elements of the international common good that is the responsibility and heritage of every member of the human family.

Pope Benedict has often been called "the green pope" because he so dramatically and consistently elevated the discussion of the environment within both ecclesial and global discourse. For him, the nature of environmental degradation was an inherently global phenomenon which could not be adequately addressed by any local or even national set of policies. "We are all responsible for the protection and care of the environment. This responsibility knows no boundaries. In accordance with the principle of subsidiarity, it is important for everyone to be committed at his or her proper level, working to overcome the prevalence of particular interests."

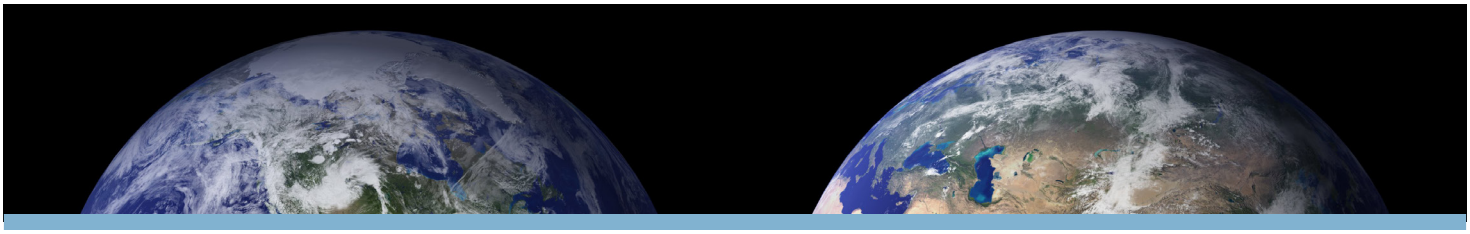
Pope Benedict rejected the pathway of addressing environmental issues in isolated ways that generate sporadic moments of progress but do not reflect a comprehensive view of the environment. Rather, Benedict recognized consistently that a sustainable environment cannot be created without collateral progress in cultural and economic development for the whole human family. Speaking in 2009, he pointed out that "the deterioration of nature is …closely connected to the culture that shapes human existence; when 'human ecology' is respected in society, environmental ecology also benefits. The earth is indeed a precious gift of the Creator who, in designing its intrinsic order, has given us bearings that guide us as stewards of his creation. Precisely from within this framework, the Church considers matters concerning the environment and its protection intimately linked to the theme of integral human development."

the Church considers matters concerning the environment and its protection intimately linked to the theme of integral human development.

In his encyclical *Laudato Si'*, Pope Francis took up this theme in delineating an emerging theology of the environment which links care for the world of nature and care for human development as correlative elements of a global common good. The first element of this delineation lies in recognizing the peril which the world faces on environmental issues at this moment in human history. The technological desire to dominate the earth has led to increasing crises in the areas of climate change, water resources and biodiversity. The Pope concludes: "We need only to take a frank look at the facts to see that our common home is falling into serious disrepair. Hope would have us recognize that there is always a way out, that we can always redirect our steps, that we can always do something to solve our problems. Still, we can see signs that things are now reaching a breaking point, due to the rapid pace of change and degradation;…the world system is certainly unsustainable…."

The "way out" of this trajectory of the increasing degradation of our earthly home, lies in approaching the central issues of the environment through a systematically international lens.

"An interdependent world not only makes us more conscious of the negative effects of certain lifestyles and models of production and consumption which affect us all; more importantly, it motivates us to ensure that solutions are proposed from a global perspective, and not simply to defend the interests of a few countries. Interdependence obliges us to think of one world with a common plan. Yet the same ingenuity which has brought about enormous technological progress has so far proved incapable of finding effective ways of dealing with grave environmental and social problems world-wide. A global consensus is essential for confronting the deeper problems, which cannot be resolved by unilateral actions on the part of individual countries."



*Hirschfeld Continued from Page 4*

is already a technique of possession, mastery and transformation. It is as if the subject were to find itself in the presence of something formless, completely open to manipulation. Men and women have constantly intervened in nature, but for a long time this meant being in tune with and respecting the possibilities offered by the things themselves. It was a matter of receiving what nature itself allowed, as if from its own hand. Now, by contrast, we are the ones to lay our hands on things, attempting to extract everything possible from them while frequently ignoring or forgetting the reality in front of us. Human beings and material objects no longer extend a friendly hand to one another; the relationship has become confrontational. This has made it easy to accept the idea of infinite or unlimited growth, which proves so attractive to economists, financiers and experts in technology. It is based on the lie that there is an infinite supply of the earth's goods, and this leads to the planet being squeezed dry beyond every limit. It is the false notion that "an infinite quantity of energy and resources are available, that it is possible to renew them quickly, and that the negative effects of the exploitation of the natural order can be easily absorbed" [106].

**Mary Hirschfeld**
*Associate Professor of Economics and Theology at Villanvoa University*

There is a danger that economic models themselves either embody this technocratic approach, or at least tend to bolster its currency in the culture. To see this, let's start with that first sentence.

"This paradigm exalts the concept of a subject who, using logical and rational procedures, progressively approaches and gains control over an external object." In other words, in the technocratic paradigm, we conceive of ourselves as agents confronting objects in the world. We have desires for those objects. We use "logical and rational" procedures in order to gain those objects. In other words, we maximize our utility functions.

*"Laudato Si'* poses a deep challenge to the discipline of economics."

Could we reply that economists don't believe that only material objects are the arguments of agents' utility functions? Agents might well value non-material goods like the utility of loved ones, the general well being of the community and so forth. Unfortunately, that is not a sufficient reply to Francis's point. First, it still formally collapses the qualitatively distinct goods that make up a human life into an "undifferentiated and one-dimensional paradigm". One person might maximize his utility function by buying a new car; another by helping the poor. But in economic models the qualitative distinction between the two acts is lost. And insofar as people think according to the economic paradigm, it becomes harder to retrieve the vocabulary that allows us to make such distinctions – distinctions that are crucial if we are to pursue meaningful and good human lives. Second, it subtly invites us to think about the people we care about as objects alongside other objects. I give to the poor because it maximizes my utility function. Yes, there's a truth to that perspective. But again, it drops the vocabulary that would allow me to see the other as a person in his own right, not an object in my utility function.

It is true that the concept of a utility function is simply meant to say that we can rank order different goods, including non-material or altruistic goods. It can represent behavior that is in fact more richly meaningful than one might think if one just looked at the mathematics. But while economists can argue that their models do not in fact require us to collapse all goods into an undifferentiated lump of 'utility', or to treat the goods we pursue as simply arguments in our utility functions, the mathematical language itself invites exactly those moves. It would do to reflect on that some. Economic models are very useful tools. But we need to be careful about the worldview that they might inadvertently suggest.

In my own experience, my training as an economist made it harder for me to see that there could be any alternative to thinking of humans as subjects "using logical and rational procedures" to "gain control over an external object." Francis lays out the alternative in this same paragraph.

"Men and women have constantly intervened in nature, but for a long time this meant being in tune with and respecting the possibilities offered by the things themselves. It was a matter of receiving what nature itself allowed, as if from its own hand." In other words, an alternative way of thinking is to see ourselves as responding to the world around us. Shaping it, but also being shaped by it. First, responding to the world around us means seeing it as it is,

and not as it might be useful to us. In a theme that haunts *Laudato Si'* from beginning to end, we need to remember that the world is created. It is a gift to us. The apple is not just a way I can remedy my hunger. It is red and crisp and beautiful. It has a value independent of my desire for it. Second, as we interact with the world we are shaped by it. The community that makes a living by fishing will be quite different from the one that makes its living herding sheep. I think of a carver I once met in Rome, whose approach to carving was to find a piece of wood and then look within the wood to find what object was there. His carving was then aimed at drawing out that object from the wood. That's the image Francis has in mind. In the technocratic paradigm, the carver has a pre-existing idea of the object, grabs a piece of wood, and then works the wood into that object.

Why does this matter? If we can step outside the technocratic paradigm it is much easier to come back into right relationship with the world around us and with each other. If I am not a sovereign self maximizing her utility function, but rather a human who is in relationship with the world around her, my desires will more naturally be limited. The goods, because valued in themselves along with in terms of their use to me, are more fully satisfying. And in allowing myself to be shaped by the world, it is easier for me to inhabit it my own finitude. The sovereign self has unbounded desires because it never encounters an other to whom it must react.

"This has made it easy to accept the idea of infinite or unlimited growth, which proves so attractive to economists, financiers and experts in technology." In other words, the technocratic paradigm, the world of sovereign selves trying to maximize their utility, makes it too easy to identify progress with economic growth. The argument is that it is the technocratic paradigm itself that makes it seem self-evident that humans have infinite desires. Our perception that scarcity is a fundamental condition of the world is an outgrowth of that paradigm. And if we think scarcity is a fundamental problem, then of course we will always think more growth is always desirable.

As I said, I think *Laudato Si'* poses a deep challenge to the discipline of economics. One can accept the pope's critique of the technocratic paradigm and still think that economics has much to offer the world. In western culture, the technocratic paradigm runs very deep, which means that economic models will do a good job of predicting human behavior. Economics has much of value to say about how incentives work, or how scarce resources can be well employed. This pope who does not fully appreciate what markets can do, could learn much from them. But on this deeper level, it is difficult to see how an economist could accept the pope's critique without having to deeply rethink what is entailed in the deployment of the basic model that sees humans as subjects who maximize utility functions.

---

*Buera Continued from Page 4*

Another example is provided by the evaluation of the trade in carbon credits: "The strategy of buying and selling 'carbon credits' can lead to a new form of speculation which would not help reduce the emission of polluting gases worldwide. This system seems to provide a quick and easy solution under the guise of a certain commitment to the environment, but in no way does it allow for the radical change which present circumstances require. Rather, it may simply become a ploy which permits maintaining the excessive consumption of some countries and sectors." Like many policy questions, the desirability of subjecting the consumption of water to the laws of the market, or the organization of markets for firms to trade carbon credit, depends on the particular details of the implementation of these hypothetical market institutions. In other words, we need to be more precise about the questions we are asking.

Would an unregulated market provide an efficient allocation of environmental goods?[1] Given the ubiquitous presence of externalities discussed above, it is not surprising that the answer to this question is negative. Does this mean that market-based mechanisms cannot result in an efficient allocation of environmental goods? No. There typically exist taxes and subsidies that guarantee that a (regulated) market allocation is efficient. These taxes and subsidies need to be chosen so that the after tax pric-

**Francisco J. Buera**
*Senior Economist and Research Advisor at the Federal Reserve Bank of Chicago*

es faced by consumers and firms reflect the impact of their consumption on other individuals. These are often called Pigou taxes, in honor of the British economist Arthur C. Pigou. A complementary approach is to affect our ethical views so that we incorporate in our decisions the well being of others. Both approaches contribute to the solution to one of societies most pressing problem. But, ultimately, the implementation of the right regulation requires good information about the magnitude of the externalities, and this requires rigorous empirical research.[2]

Regulation requires good information about the magnitude of the externalities, and this requires rigorous empirical research.

The ongoing draught affecting the western part of the US, with a particular acute impact in California, provides a concrete example of the role that markets (or the lack of them) have in ameliorating or exacerbating environmental crisis. Even though it is agreed that water is a scarce resource, especially during draught years, the price paid by individual consumers and commercial users do not reflect this scarcity. Indeed, the price that is charged only reflects the cost of the infrastructure needed to deliver the water.[3] Instead of adjusting prices, during draught years quotas are imposed. Should price of water be adjusted to reflect the scarcity of it? Would this necessarily affect the basic right to have access to safe drinkable water?

It can be argued that rational and fair pricing policies can and should be designed. First, a pricing policy can be chosen so that the price of the first units is accessible. This would guarantee access to safe and drinkable water. Indeed, a majority of the consumption of water in California is used in agriculture. Second, by adjusting the cost of additional units in periods when water is particularly scarce, we naturally incentivize individuals to adjust their consumption and, therefore, better conserve this natural resource. Are market-based solutions for the water problem a modern invention? No. Auctions to assign water among farmers have been used for centuries in Spain, as recently studied by Donna and Espín-Sánchez. They also analyze conditions under which market mechanisms provide desirable outcomes.[4]

To conclude, it is important to stress that modern economics study the functioning of a very broad class of institutions, which include more complex and realistic generalizations of the simplistic markets that are often the focus of the public debate. As such, it provides a useful tool to analyze public policies, and to respond to the calling in *Laudato Si'*, where we are reminded that "[o]n many concrete questions, the Church has no reason to offer a definitive opinion; she knows that honest debate must be encouraged among experts, while respecting divergent views."

1. By efficient allocation I mean an assignment of environmental goods across individuals, from present and future generations, that cannot be adjusted to make someone better off without making another person worst off. In simple words, efficient allocations are not wasteful.

2. For a recent review of the empirical literature, with an emphasis on the environmental problems in developing economies, see Greenstone and Jack, "Envirodevonomics: A Research Agenda for an Emerging Field," *Journal of Economic Literature*, 2015, 53(1): 5-42.

3. A based this brief characterization of California's water regulations on a 2008 report by the Legislative Analyst's Office, "California's Water: An LAO Primer", which can be found online: http://www.lao.ca.gov/2008/rsrc/water_primer/water_primer_102208.pdf.

4. See Donna and Espín-Sánchez "Complements and Substitutes in Sequential Auctions: The Case of Water Auctions" and "The Illiquidity of Water Markets: Efficient Institutions for Water Allocation in Southeastern Spain".

*The views expressed here may not necessarily reflect the views of the Bank or the Federal Reserve System.*

*Gundersen Continued from Page 5*

income. The placement of the well-being of poor persons at the center of the discussion of climate change represents a departure from others whose central reason for concern is often due to its damaging effects on the earth without necessarily concerns for those who would be most influenced by climate change [90].

Given the emphasis on the implications of climate change for the well-being of poor persons, one may be disappointed about some general directions proposed in *Laudato Si'*. I place these concerns in the context of what is, from my perspective, the leading problem that we face in the world - how to reduce malnutrition and hunger over the next 30 years. Addressing this is made difficult because of limited land – virtually all land that can be productively used for agriculture is being used – and a growing population – it is projected that there will be 9.3 billion people in 2050. In response to this challenge of needing to increase yields, a wide array of amazing agricultural technologies have emerged that are and reducing food insecurity and have the potential to further reduce food insecurity. Of most importance are Genetically Modified Organisms (GMOs). Briefly, GMOs entail taking a gene or genes from another organism and putting them into another organism in order to, among other things, improve yields; provide resistance to droughts, insects, and other pests; and improve nutrition. To date, GMOs have had a profound impact on reducing food insecurity (e.g., through higher yields, food prices have declined; small-scale cotton farmers in India who use Bt cotton rather than traditional varieties have increased incomes ) and they have the potential to have even larger impacts in the through the use of so-called second generation GMOs which are designed to address nutritional concerns (e.g., Golden Rice reduces Vitamin A deficiency, one of the more serious health issues facing the poor in lower-income countries, especially in India ). As another benefit, by reducing the use of other agricultural inputs, GMOs also lead to improvements in the environment and, in particular, lead to reductions in global warming. (In fact, many of the environmental outcomes noted in [20] can be sharply reduced through the use of GMOs.) Unfortunately, despite the many profound benefits associated with GMOs and the lack of any credible evidence of negative implications for human health or the environment, there remains resistance to them across some sectors and of most concern, in countries which could benefit most from the use of GMOs.

GMOs have had a profound impact on reducing food insecurity.

*Laudato Si'* had the potential to praise GMOs and urge their further adoption and development, both as a way of addressing climate change and reducing food insecurity. Unfortunately, both directly and indirectly, the Encyclical has the potential to damage the efforts by many to promote GMOs and their attendant benefits.

Directly, the Encyclical is neutral to negative regarding the benefits associated with GMOs [133-135]. And, as part of this, many false statements regarding GMOs are made including, for example, that their use tends to concentrate landownership in the hands of fewer farmers.

Indirectly, *Laudato Si'* is critical of many of these underlying processes that have led to the development of GMOs. Many GMOs, especially those that have been most widely adopted, have been developed by large-scale multi-national companies such as Monsanto and DuPont-Pioneer. The research needed to develop these GMOs is extraordinarily expensive as is the resulting arduous regulatory process in the U.S. and globally. In return these companies expect these to be profitable products. In addition, farmers, especially low-income farmers in low-income countries, use these seeds in an effort to be more profitable. While seeking profits – whether by multi-national companies or subsistence farmers – can be problematic, we need to recognize that, without this motive, virtually all of the technological advances we have made, including with GMOs, are unlikely to have been made. It is therefore disappointing that this Encyclical does not provide a more balanced perspective on either the benefits of technology or the benefits of profit-maximizing behavior.

I do not wish to end on a negative note. Instead, I wish to praise the goodness within *Laudato Si'* that will encourage Catholics and non-Catholics alike to work to improve the well-being of poor persons across the world.

**Craig Gunderson**
*Soybean Industry Endowed Professor in Agricultural Strategy at the University of Illinois*

*Sanchez Continued from Page 5*

lives in it. Nature cannot be regarded as something separate from ourselves or as a mere setting in which we live. We are part of nature, included in it and thus in constant interaction with it. Recognizing the reasons why a given area is polluted requires a study of the workings of society, its economy, its behavior patterns, and the ways it grasps reality. Given the scale of change, it is no longer possible to find a specific, discrete answer for each part of the problem. **It is essential to seek comprehensive solutions which consider the interactions within natural systems themselves and with social systems. We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature".**

These last three aspects: the reduction and the ending of poverty, social inclusion and environmental sustainability are the three integral elements of the **sustainable development**, an issue that has worried many economists for many years and even some consider it a field of economics.[2]

Of these three objectives, economic growth has enabled the reduction of global poverty in a very significant way. According to World Bank figures, the global poverty rate has decreased from 43% in 1990 to 21% in 2010 and will probably continue to decline.

In Chile, poverty decreased from 38.6% in 1990 to 7.8% in 2013, while extreme poverty fell from 13% in 1990 to 2.5% in 2013 according to the Casen (Socio-economic characterization survey).

But, although poverty has diminished, it has not disappeared. There are whole areas of Africa and Asia where poverty is still prevalent. In my own country there are places where there are still high levels of poverty. Economic growth is fundamental to achieve sustainable and long -term solutions for poverty reduction.

However, the world has not done very well on inequality, social exclusion and the respect for the environment. The challenge of achieving balanced growth persists, with poverty reduction, the reduction of exclusion and inequalities with a reduction in emissions compatible with the limits imposed by nature.

Economic growth has enabled the reduction of global poverty.

This is a concern that the Pope has expressed on several occasions. In EG (204) says: "Growth in justice requires more than economic growth, while presupposing such growth: it requires decisions, programmes, mechanisms and processes specifically geared to a better distribution of income, the creation of sources of employment and an integral promotion of the poor which goes beyond a simple welfare mentality".

The Pope strongly criticizes the position which holds that growth by itself will solve all the problems of poverty in the world.

In LS (109) says "Some circles maintain that current economics and technology will solve all environmental problems, and argue, in popular and non-technical terms, that the problems of global hunger and poverty will be resolved simply by market growth".

This criticism is to technological and

**José Miguel Sanchéz**
*Professor of Economics at*
*Pontificia Universidad Catolica de Chile*

market fundamentalism. Certainly, the proposed vision in 109, is a fairly extreme view, which is hardly sustained nowadays by any serious economist. I don't think that there are many economists, even among those who support free markets, who seriously think that growth will take care of the hunger and poverty problems in the world or think that "the market by itself will guarantee integral human development and social inclusion" (109). The vast majority of economists agree that it is necessary to assure the existence of institutions and conditions to ensure "the human person the basic and inalienable rights to their ordered integral development" and for this we must ensure "social causes that enable the poorest regular access to basic resources" (109, 157) as well as (EG 192) "We do not talk about ensuring all the food, or a ‹‹decent livelihood››, but they have ‹‹prosperity without excepting any good››. This involves education, access to health care and especially work, because in free work, creative, participatory and solidarity, man expresses and enhances the dignity of your life. The fair wage allows adequate access to other goods which are intended for common use".

Another concept used by the Pope in the encyclical that is a widely studied concept in economics is the common property resource or common pool resource. The problem of the common

pool resource arises because of the absence of property rights for the resource. Therefore, when everybody owns it, nobody owns it and with free access to the good, it will be overused and eventually degraded. The encyclical, (23) states that the climate is a common pool good. We know that in the case of climate change, the common property resource, "that is of all and for all", is the atmosphere and if access to this common good is not regulated, it will used inefficiently. In 174, it states: "What is needed, in effect, is an agreement on systems of governance for the whole range of so-called "global common goods". This is why the World Conference COP21 meetings that will occur during the second half of the year are so important. World diplomacy will be tested to see if it is able to achieve emission reduction agreements that are measurable, verifiable and mandatory for countries.

But even achieving an emissions reduction agreement, countries will have to decide how to meet their commitments and here economics as a discipline can make an important contribution because we know that incentives must be well placed to create reductions and for that the signals have to be well placed.

For example, today by the wide availability of gas in the world, a result of the increase in the production of shale gas, the demand for coal has been severely diminished, resulting in a sharp drop in the price of coal, which gives a signal in the direction of carbonizing the energy production matrix, just in the opposite direction of replacing the use of fossil fuels. As economists, we stress the importance that emitters face the full cost of their actions. There are several tools that can be used to achieve this goal and which instrument is the most cost effective is a question where economics can also make a great contribution.

Over several passages of LS, economics is presented as the cause of many of the ills that affect humanity today. Even though there may some truth in this, it is also true that the market economy has contributed very significantly to solve some of the problems and in any case, it has to be part of the solution.

In the encyclical there are several invitations to hold a dialogue and to broad discussions on science and social responsibility (16, 61, 135) since there is a recognition that the Church does not have to propose a final word on many specific issues both environmentally or socially and economically.

As a scientific discipline we must play a part in this challenge and to contribute to its solution. I think that for economics as a discipline there is also an invitation since Economics as a science has much to contribute to the discussion of these issues.

1. Since many of the points and ideas presented by the Pope in LS, had already been discussed extensively by him in his apostolic exhortation Evangelii Gaudium (EG), I will also make reference to that document.

2. See for example, Jeff Sachs, *The Age of Sustainable Development*, March 2015, Columbia University Press.

---

*Doran Continued from Page 6*

things that don't affect the average much can often help the privileged while hurting the disadvantaged. They are definitely not quelled when educated Americans who are unlikely to experience any labor market competition from low skilled migrants respond to their fears by lecturing them about not being xenophobic. This has the opposite of the intended effect on the debate: it insults the people who are likely to face all of the labor market competition with refugees but only a small fraction of the total employer and consumption gains described above. And insulting these people prolongs the debate, debases our discourse, and leaves more people like Aylan to suffer and die needlessly.

Even if the gains to the gainers outweigh the losses to the losers, it is our duty to assure the losers that they will be recompensed from these gains. We can reach towards a Pareto improvement by establishing programs to train and match with jobs workers likely to be strongly affected by a sudden influx of refugees. This will take some tax dollars from the rich, but it is the rich who are likely to benefit the most from increased immigration of low skilled workers, and so it is the rich who should ease the burden on their low skilled fellow citizens.

Most of all, we can invite all Americans to view accepting many refugees as a noble sacrifice. Instead of pretending that it is impossible that anyone could suffer from accepting a large influx of refugees, we should embrace the truth that there will be some suffering. There is a glory and a joy in suffering when we suffer for love of others and love of God. Young people know this in their hearts, which is why they so often rebel against our superficial and materialistic society. Suffering with and for these refugees will help ensure that children like Aylan Kurdi can live as God intended them to: surrounded by His love.

# Contributors

**Francisco J. Buera**, a member of CREDO's Advisory panel, is Senior Economist and Research Advisor at the Federal Reserve Bank of Chicago. His research focuses on the macroeconomic aspects of economic development, including studies on the role of financial markets, the forces driving the changes in the structure of production over time, the diffusion of technologies, economic policies and institutions across countries. Buera was born and grew up in Buenos Aires, Argentina, and remembers Archbishop Jorge Bergoglio before he became Pope Francis. Buera is a parishioner at Our Lady of Mount Carmel Church, Chicago.

**Kirk Doran** graduated magna cum laude in Physics from Harvard University in 2002 and received his Ph.D. in economics from Princeton University in 2008. His principal research interest is in applied microeconomics, with a particular focus on human capital complementarities. His recent work has focused on the role of externalities, collaboration, and geographic distance in knowledge production. Professor Doran's research has been published in journals such as the *Quarterly Journal of Economics,* the *Review of Economics and Statistics,* the *Journal of Labor Economics*, and the *Journal of Human Resources*. Kirk and his wife Margaret have five children. He serves on the Parish Council of St. Matthew's Cathedral in South Bend, Indiana. His favorite author is J.R.R. Tolkien, and he is a trained singer with a bass voice, specializing in music from chant to baroque and early classical.

**Craig Gundersen** is the Soybean Industry Endowed Professor in Agricultural Strategy in the Department of Agricultural and Consumer Economics at the University of Illinois and Executive Director of the National Soybean Research Laboratory. He is also a member of the Technical Advisory Group of Feeding America and is the lead reqsearcher on the Map the Meal Gap project. Gundersen's research is primarily focused on the causes and consequences of food insecurity and on evaluations of food assistance programs. His family and he are parishioners at St. Patrick's in Urbana, Illinois.

**Mary Hirschfeld** is assistant professor of economics and theology in the department of Humanities at Villanova University. She earned her Ph.D. in economics from Harvard University in 1989 and her Ph.D. in theology from the University of Notre Dame in 2013. She is a fellow of the Dominican School of Philosophy and Theology, and serves on the Board for the Program of Catholic Social Thought at the Lumen Christi Institute. Her recent publications are on the boundary between economics and theology. Currently she is working on her book, *Toward a Humane Economy: Aquinas and the Modern Economy*, which develops an approach to economics rooted in the thought of St. Thomas Aquinas.

**Joseph P. Kaboski** is the President of CREDO and the David F. and Erin M. Seng Foundation Professor of Economics at the University of Notre Dame. His research is in the area of economic growth, development, and international economics. In 2012 he was awarded the prestigious Frisch Medal for his research on microfinance in Thailand. He has consulted for Catholic Relief Services on poverty programs in East Africa, and is a consultant to the USCCB (U.S. Bishops Conference). He teaches a course on economics and Catholic social thought. Kaboski earned his Ph.D. in economics from the University of Chicago. He and his family attend St. Pius X Catholic Church in Granger, IN.

**Bishop Robert McElroy** is the Bishop of the Diocese of San Diego, California. He was born and raised in California as a 5th generation San Franciscan, attending Catholic grade school and the high school seminary. An expert in Catholic social teaching, he holds bachelor's and master's degrees in American history from Harvard and Stanford, respectively; a licentiate in theology from the Jesuit School of Theology at Berkeley; a doctorate in moral theology from the Gregorian University in Rome; and a doctorate in political science from Stanford. Bishop McElroy has written two books: *The Search for an American Public Theology* and *Morality and American Foreign Policy*. He was appointed Auxiliary Bishop of San Francisco in 2010 by Pope Benedict XVI, and Bishop of San Diego in 2015 by Pope Francis.

**José Miguel Sánchez** is Professor of Economics at Pontificia Universidad Catolica de Chile. He is currently the Dean of the Faculty of Business and Economics. His schooling was at Saint George´s College, a school from the Holy Cross Congregation in Santiago. He studied Economics at Pontificia Universidad Catolica de Chile, where he obtained his undergraduate degree and a Master in Economics. Sanchez earned his Ph. D. in Economics from the University of Minnesota. His research is in the area of applied micro, and more specifically in environmental economics and the economics of regulation.