

Crisis and Integration in North America Finances vs. Energy and Environment? Implications for Mexico

Ángel de la Vega Navarro*



Toru Hanai/Reuters

The financial crisis originating in the United States has led to another larger crisis that affects production processes linked to growth and employment in several countries and regions of the world. This is important for Mexico's economy, whose gross domestic product (GDP) may shrink even more than in 1995 (-6.2 percent). But the

difference now is that there are no conditions for a rapid recovery like the ones that existed during the 1994-1995 crisis, since the U.S. economy at that time was significantly buoyant and there was a market for Mexican exports and conditions to get capital flowing again. Now, the Mexican economy, finally officially declared in recession in early May, does not have its neighbor to jumpstart it and extricate it from this situation.

An International Monetary Fund analysis developed for the recent G-20 meeting stated that the world economy may decline 1 percent in 2009, the worst drop in 60 years, while that of the United States could decrease -2.6 percent. The

* Professor in the UNAM graduate programs of economics and engineering. Current occupant of the José María Luis Mora Extraordinary Chair in international economics. adelaveg@servidor.unam.mx.

Decreasing investments may also have an impact on climate change by possibly escalating the amount of greenhouse gas emissions as a result of a drop in fossil fuel prices and the financial difficulties that will affect investment in clean energy technologies.

importance of this plunge, linked to a severe credit crunch, makes it impossible to talk about rapid recovery. In addition, we should look to the lessons of history: recessions are longer and deeper in the United States if they are linked to financial crises and simultaneous recessions in other economies.¹ This year, the economies in the Euro region and Japan will also decline significantly (-4.2 percent and -5.8 percent, respectively). Since 2007, the U.S. banking and financial sectors have been experiencing significant turbulence. Its magnitude and the concerns it raises probably explain the Obama administration's strategies and priorities: he has taken office with new ideas to bring a lasting reactivation of the U.S. economy, which will require important changes in production. It is expected, then, that energy industries will undertake new innovative forms of organization that will contribute to the growth of the economy as a whole, at the same time that they lead to a new energy-environmental paradigm for which the scientific, technical and industrial knowledge already exists.

However, after the collapses of autumn 2008, in the short term, the main problem is the banking and financial system. Given the fear that the United States could undergo a long period of stagnation, as has happened to Japan since the 1990s, the prevailing idea seems to be that the priority is reestablishing the private banking and financial system so credit can flow again, and thus avoid a succession of government stimulus programs that would not contribute to a self-sustained reestablishment of the mechanisms for investment and growth.

The idea that the state must once again intervene has been generally accepted, given the gravity of the crisis, but the debate centers on what kind of intervention it should be. For some, it is only useful for repairing failed mechanisms, not because it can lead to growth, since growth is the result of technological innovation and advancing productivity attributable only to the private sector. Given this perception, the president's office has not clearly said how specific policies can ensure short-term shots in the arm and at the same time create the basis for long-term growth. This can only result from important investments. The problem is that in the immedi-

ate future, what can be foreseen is a sharp fall both for renewable and non-renewable energy sources.² Equipment producers are expected to reduce research and development investments in more energy-efficient models. Decreasing investments may also have an impact on climate change, by possibly escalating the amount of greenhouse gas emissions as a result of a drop in fossil fuel prices and the financial difficulties that will affect investment in clean energy technologies.

It is true that there has been talk about investment in infrastructure, education, health and renewable energy, but the first measures taken illustrate some of the priorities. The stimulus program passed in February 2009 was substantial: US\$787 billion, the equivalent of more than 5 percent of GDP. But its distribution is also significant: US\$45 billion for energy infrastructure and US\$51 billion for tax breaks for the private sector. Added to this is the aim that the financial markets recover rapidly based one way or another on government monies.

Congress approved an 8-percent spending hike for fiscal year 2009; this will create a significant increase in government debt, which will jump from 40 percent to 60 percent of GDP. The aim is to stimulate the economy like several other countries are doing by increasing their fiscal deficits. The problem is that these public resources are flowing preferentially into the financial sector without new rules being put in place to change the behavior that led to the gigantic bubble that sparked the current crisis. To exit from this crisis, many things have to change, but it is not yet clear what kind of new regulations should be put in place to improve the banking and financial system's functioning and to also contribute to reorienting productive structures.

Certainly, realistically, above all when the possibility of nationalizing the banks has been taken off the table, measures should be taken to increase companies' resources, reduce indebtedness and reestablish the financial bases of financial intermediaries and banks. In the current circumstances, the latter seem to be the weak link in the economy, and the prevailing idea is that they should be supported. For that reason, in addition to the US\$700 billion bail-out approved October 3, 2008, the Federal Reserve has committed several billion dollars to guaranteeing against losses from bad quality mortgage assets owned by AIG, Citigroup and the Bank of America. Citigroup alone has received US\$25 billion through the Troubled Asset Relief Program (TARP), US\$20 billion from the Treasury Department's Targeted Investment Program and US\$5 billion from Treasury in support related to losses on assets.

Amidst these investment restrictions and financial constraints, how could the proposals Barack Obama has been making bring about a lasting recovery of the economy? The answers are important for the future of the U.S. economy in the short and long terms, and for the Mexican economy as well, because of the close ties between the two. Since his campaign, Obama has used the example of renewable energy to illustrate his ideas about the new kind of industrial and technological development he proposes with job creation, reduction of CO₂ emissions, lower dependency on oil imports and energy security. When he took office, he made proposals to earmark public spending not only to achieve a short-term reactivation of growth and employment, but also for long-term goals, important among which are those related to renewable energy and the environment. At the same time, he has proposed promoting responsible domestic production of oil and gas, combining greater domestic production with greater oil savings that would also contribute to energy security. To attain this goal, he intends to raise fuel consumption standards and the number of hybrid cars; offer tax credits on the purchase of vehicles that use advanced fuels; and establish national norms for low-carbon-level fuels. Although all their implications are not yet clear, President Obama's new energy policies may have new and important impacts, above all if they translate into a lasting, significant reduction of imports.

In addition to decreasing oil needs and lower consumption because of the recession, the United States will be under more pressure to reduce carbon emissions, as will Canada and Mexico. All three countries would benefit from greater cooperation around issues like energy efficiency, renewable energy, cleaner fossil fuels and energy infrastructure. Not only government agencies or companies could participate in this kind of cooperation, but also research centers, universities and associations linked to renewable energy sources and the environment, among others.

The developed countries must take leadership in the transition to low-carbon economies and their research and development requirements. However, that leadership must not leave out the less developed economies in the region, like Mexico. It is no longer possible to think that every country will be able to resolve everything alone: as Obama himself has said, "We know that we can't afford to tackle these issues in isolation."³ The challenge is to create or bolster institutions regionally and sectorally capable of taking initiatives to cooperate, combining knowledge, technologies and financing.

Since his campaign, Obama has used the example of renewable energy to illustrate his ideas about the new kind of industrial and technological development he proposes, with job creation, reduction of CO₂ emissions, lower dependency on oil imports and energy security.

The possible evolution of U.S. oil policy and its results, above all with regard to less dependence on oil imports, poses challenges for the countries that until now have been its main suppliers, particularly the closest ones like Mexico and Canada. In the case of Canada, its foremost supplier, it will be interesting to see what happens with the oil extracted from tar sands, an important part of its reserves, production and exports. An important challenge is posed here: making sure that the tar-sands production is environmentally sustainable. It produces more greenhouse-gas (GHG) emissions than conventional oil and also causes other damage to the environment, like, for example, the enormous expenditure of water and gas it entails. This partly explains why the recently passed U.S. 2007 Energy Bill's Section 526 prohibits federal fuel purchases if their production generates more GHG emissions than conventional oil.

The importance of the Canadian-U.S. relationship, particularly with regard to energy and environmental issues, was shown during Barack Obama's first trip abroad as president. During his stay, he and Canada's prime minister announced the launch of the U.S.-Canada Clean Energy Dialogue, a scientific collaborative effort to develop new technologies aimed at reducing GHG emissions and fighting climate change.

As mentioned above, Obama has formulated interesting proposals about cleaner energy development as an important component of a strategy for overcoming the crisis. He can forge an interesting partnership with Canada, taking into account the two countries' degree of development and integration, since they have already made substantial investments in research for carbon capture. Will this energy-environmental dialogue extend to Mexico, or will the relationship between our country and the United States continue to be marked by issues linked to security, drug trafficking and migration?

With regard to Mexico, in the current conditions (drop in production and the state of reserves, among other things), it is questionable whether the level of oil exports to the U.S. that the country has maintained for decades can be kept up. Analysts consider that Mexico does not have the potential

Mexico must postpone the depletion of its non-renewable energy, reviewing export policy and establishing greater internal efficiency, at the same time that it immediately begins to broaden the role and place of renewable sources.

to autonomously transition toward a more diversified, cleaner energy base. Therefore, the topic of strategies and public policies that it must adopt as a producing country—and eventually as an exporting country—must be broached so that it can transition toward developing alternative fuels. Can the fossil-fuel paradigm, which has marked Mexico's development, be extended and for how long? Can this be done without it having grave consequences when other countries—even ones with similar levels of development, like Brazil—have already made advances in designing strategies and policies that combine the fuel, technological and environmental dimensions?

In orienting itself toward a sustainable, diversified energy future, Mexico faces several deficiencies in the fields of information, technology, research and development and financial resources. On the other hand, it does have the human resources and the potential for technological assimilation and national integration for developing renewable energy sources like wind, solar, mini-hydraulic and bio-mass, all of which require locally manufactured equipment and instruments.

It also exhibits important deficiencies regarding an adequate institutional and regulatory structure; in many cases what is currently in place acts more as a brake. The energy transition is not only linked to knowledge about new fuel sources or technologies, but also to renovated institutional and regulatory frameworks favorable to new developments and opportunities. There has been a lack, for example, of special regimes with guaranteed rates for generating electricity based on renewable fuels. In other countries, regimes of this kind ensure guaranteed access, long-term contracts stipulating terms for connection and payment for transport of electric power (wheeling contracts) and fiscal incentives. Mexico's legal framework is also not apt for plans for distributed or co-generated production based on renewable sources that can connect up with the Federal Electricity Commission or Central Light and Power systems. Among other things, it is absolutely necessary to perfect the long-term contracts and payment conditions that prioritize generation, transmission and distribution of electrical power using renewable sources.

The question is whether Mexico's recent reforms will be able to meet the need to articulate and implement a long-term energy policy with a clear strategic focus. It is true that more financial resources will be put into research and technological development. This is undoubtedly an important step, but it is insufficient, since a new institutional framework adapted to long-range energy, technological and environmental development is also required. It is important to discern the challenges and situate them correctly: Mexico must postpone the depletion of its non-renewable energy, which will continue to be its main source in the coming years, reviewing export policy and establishing greater internal efficiency, at the same time that it immediately begins to broaden the role and place of renewable sources. The need to prevent any drop in investments in hydrocarbons at the same time that investment in alternate sources is not neglected becomes a central concern to ensure that productive capacity is in place when the economy reactivates.

The market and private actors will not be enough to deal with all this in the three countries of North America: the state will have to continue to play a fundamental role. This seems to be clear to President Obama, at least, despite the deficiencies and restrictions of his proposals. The deployment of new energy sources and technologies, for example, depends on the availability of new or revamped infrastructures that facilitate the transition not only to a cleaner, more diversified energy base, but also to a new low-carbon economy. This is a long-term task in which the state will have to assume strategic responsibilities. ■■■

NOTES

¹ About the nature of recoveries according to the type of recession historically speaking, see International Monetary Fund, "From recession to recovery: how soon and how strong," Ch. 3 of *World Economic Outlook*, 2009, available on line at <http://www.imf.org/external/pubs/ft/weo/2009/01/pdf/c3.pdf>.

² OECD/IEA, "The Impact of the Financial and the Economic Crisis on Global Energy Investment," 2009, available on line at <http://www.ilsol24ore.com/art/SoleOnLine4/Mondo/2009/05/Impact-crisis-energy-investment.pdf?uuiid%3D716fe52c-486c-11de-8b93-5eacd5e2fc6c>.

³ See Ross Colvin and Jeff Mason, "Obama reassures Canada on open trade," February 19, 2009, <http://www.reuters.com/article/environmentNews/idUSTRE51G0YM20090220>.