

The UniCredit view

24 Giugno, 2010

Sustainable profits - 1

Current well-being has to do with both economic resources, such as income, and with non-economic aspects of peoples' life (what they do and what they can do, how they feel, and the natural environment they live in). Whether these levels of well-being can be sustained over time depends on whether stocks of capital that matter for our lives (natural, physical, human, social) are passed on to future generations.

(Report by the Commission on the Measurement of Economic Performance and Social Progress – Stiglitz Sen Fitoussi)

This definition imply an accurate and wide measure of well being and the ability to foresee its development. It is very general.

The financial market during the pre-crisis period favoured a development in some sector (i.e. the housing market, and the linked well being of possessing a new or bigger house, and the construction sector) that is clearly unsustainable. On the same venue also its own profits were unsustainable.

But financial markets always deals with sustainability

- allocating resources from a saver/investor to a borrower
- allocating inter-temporarily resources among different phases of the life cycle of each individual

Let's for now concentrate on a more restricted issue, that of climate change, and hence sustainability referred to the environmental problem.

Sustainable profits - 2

The low energy intensity of the financial sector means that reductions in greenhouse gas (GHG) emissions would have little impact on the physical operations of financial markets and institutions (unlike, for instance, their effects on electricity production or transport).

It is not immediately obvious what role financial markets can play in addressing climate change. Climate change happens slowly and has a global impact on the physical environment, whereas financial markets react to news in fractions of a second and are almost liberated from specific physical locations.

P. Mills IMF Finance and development March 2008

If the world economy grows by 2 or 3 percent a year over the next 40 years (that is, triples), emissions per unit of output would have to fall by a factor of about 8 (to remain in the 2° increase ndr). That is a radical transformation by any standard, requiring almost complete decarbonization of electricity production by 2050. Strong and sustained investment in emission reduction and carefully designed policies will be needed to correct the market failure caused by greenhouse gas emission externalities. This transformation will take several decades, but the next 10 years are crucial.

Bowen, Romani, and Stern IMF Finance and development March 2010

Stern (2007) and other related scientific literature reports that greenhouse gas emissions generated by human activities will very possibly lead to global temperature increase of 1-5 degrees C by 2050. This will cause a dramatic increase in global risks to human life. The response to this will be the seeking-out of financial innovation by major forms, primarily in the area of insurance, but also in the diversification of asset holdings. We suggest in this paper that, with modest climate changes of 1-2 degrees C, the global insurance market will expand dramatically. However, under more extreme climate change scenarios, the entire global financial structure will undergo major changes, with a re-focusing of major financial activity away from intermediation between borrowers and lenders and the facilitation of the accumulation of assets, and towards a focus on insurance arrangements and the diversification of risks associated with climate change.

Global Financial Structure and Climate Change John Whalley and Yufei Yuan NBER Working Paper No. 14888 April 2009

Sustainable profits - 3

A significant change in economic structure in most countries, the bulk of which has to be implemented in the near future;

Moreover, someone suggests also that a potentially huge change in financial markets could happen.

Let's see more in detail financial institution and the transition towards sustainability:

....Nevertheless, financial markets potentially play two important roles in the policy response to climate change . First, they foster mitigation strategies—that is, the steps taken to reduce GHG emissions for a given level of economic activity—by improving the efficiency of schemes to price and reduce emissions (for example, carbon permit trading) and the allocation of capital to cleaner technologies and producers. Second, financial markets can cut the costs of adaptation—that is, how economies respond to climate change—by reallocating capital to newly productive sectors and regions and hedging weather-related risks.

P. Mills IMF Finance and development March 2008

Financial institutions can choose their way in this transition: first step, look inside the institution

Actually, areas of potential environmental impact has been addressed with a certain degree of accuracy in our firm.

Likely the most obvious areas are the comprehensive structure of buildings, the waste of papers, the frequency of business trips by employees (like mine here to Rome).

- On the first topic the Munich building for example (but all the bank buildings are subject to an analysis called: Green Real estate).
- On the second, in a daily collection of wasted paper and widely diffused cans for other types of recyclable waste are clear witnesses of the effort here.
- On the third aspect, a wide impulse on communication instruments others from physical travelling, like video web conference and calls.

But all of these stuffs are, let's say so, easy, just because we are a services providing firms with low energy intensity.

Financial institutions can choose their way in this transition: the internal view is not enough

Financial markets always deals with sustainability and it is unavoidable the reference to two facts:

- 1) the sustainability issue of some financial instruments course translate itself in the phenomenon of bubbles that in the end could be interpreted as the aggregate result of a lack of coordination among individual information and actions.
- 2) the crisis that hurt the world economy has to be considered as the eventual outcome of the pursuit of unsustainable profits on the basis of a regulatory arbitrage activity that was accompanied by a mispricing of actual risks implicit in this activity.

Sustainability, regulation, mispricing, risks are all categories that directly apply to the issue at stake here.

Financial institutions can choose their way in this transition

Hence let's combine the internal and external view; financial industry could play :

1. • a slim role as directly related to emission,
2. • a modest (but not negligible) role as a smoother of the ETS market whose liquidity and well functioning would benefit the measurement of these stuffs,
3. • a relevant role as a signaler of unsustainability of business profits elsewhere,
4. • a critical role as it contributes to the shaping of the “real economy” landscape, due to its role as a resource provider and resource allocator,
5. • a fundamental role if it helps to internalize prices and prospects for resources otherwise considered freely disposable.

Which of these five role it will play depends, crucially, on choice that are partly internal to financial industry firms and partly external.

Actually, the boundaries among these five possible roles are less clear than prima facie impression can suggest. Sustainable profits for a bank imply the consciousness of having taken into account all the possible sources of risks and provided all the requested cushion and limits to the exposure at risks.

How can this be achieved?

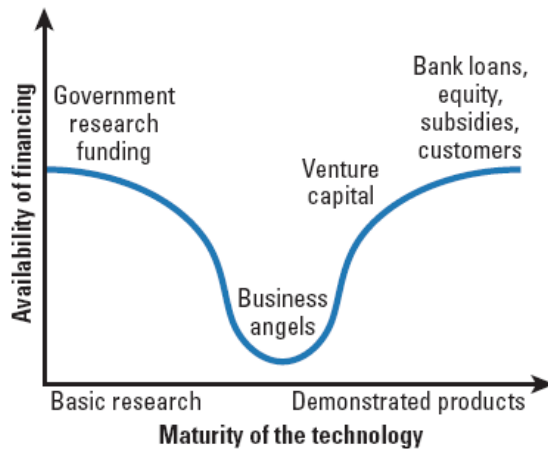
Shaping credit policies according to the acknowledgment of the issue linked to sustainability could have a direct impact on profits.

Deployment of new technologies - 1

The push toward greener technology is one of the most powerful way to favour a safe transition towards sustainability. This is a particularly relevant issue in developing countries.

As the World Bank refer in her Development Report 2010, as for all kind of technology there is a phase (between the basic science/generation of the idea and its actual implementation in the market) that is particularly critical in terms of financing.

Figure 7.6 The "valley of death" between research and the market



Source: WDR team.

How to fill that part? Public intervention is the only solution there, at least in terms of incentives. This is one of the area in which the contribution of the financial market can be fruitful. In fact a lot of public funding of "general" (let's use the industrial economics acronymous for that: horizontal policies) and selective (vertical) policies are distributed with the intermediation of financial market.

Deployment of new technologies - 2

Actually in Italy Unicredit MCC plays the role of manager of public funds; in particular it manages the SMEs guarantee funds and of the national and regional innovation related programmes. For all of those public incentives MCC analyses the documentation in order to decide if assign the benefit or not.

Note that these kinds of contribution/incentives has two practical pros: it allow to direct technological change with relatively little expenditures and it generates learning processes in the private sector (banks can benefit from knowledge gained in doing the analysis).

UniCredit is also going to introduce a direct sustain to innovative start up firms, benefiting from the knowledge already built in-house and enhancing its accumulation.

In this respect a quite wide initiative based on an award named Il talento delle idee, has been promoted in the last months.

It is important to signal that on 270 innovative ideas arrived a relevant number could be classified as “Green innovation”.

Deployment of new technologies – 3

What's literature says

The main implications of factoring in the importance of directed technical change are as follows: (i) when the inputs are sufficiently substitutable, sustainable long-run growth can be achieved using temporary policy intervention (e.g., a temporary research subsidy to the clean sector), and need not involve long-run distortions; (ii) optimal policy involves both “carbon taxes” and research subsidies, so that excessive use of carbon taxes can be avoided; (iii) delay in intervention is costly: the sooner and the stronger is the policy response, the shorter is the slow growth transition phase; (iv) the use of an exhaustible resource in dirty input production helps the switch to clean innovation under laissez-faire when the two inputs are substitutes.

Energy, The Environment, And Technological Change, Popp Newell and Jaffe

....markets are unlikely to provide proper incentives for the development of clean technologies, absent public policy. As in other areas of technological change, knowledge spillovers lead to underinvestment in R&D by private firms. However, even if all knowledge market failures were addressed, firms would still underinvest in environmental R&D, as many of the benefits to providing a cleaner environment are external. By addressing the externality problem, environmental policy increases incentives for environmental R&D. One question is how the dual market failures of environmental externalities and knowledge spillovers interact. Is simply combining environmental policy to address externalities with general technology policy to address spillovers sufficient, or do these two market failures interact in ways that necessitate specific technology policies for the environment?

***The Environment And Directed Technical Change, Acemoglu Aghion Bursztyn Hemous
NBER wp15451***

How to measure sustainability

As said the internal carbon footprint is small and while it is relevant on philosophical terms has no relevant implication. The relevant part, with a complex measurement issue, is the attention to the financed emission. In fact a rational use of natural resources is not intended as a philanthropic or publicly shared attention to risks of an excessive (with respect to regeneration capacity) exploitation of them. There is an explicit recognition of the fact that internalizing these arguments in day to day operations of the bank represent on one side an opportunity (the operators of the economy that pursue green innovative technology will be likely awarded in the medium term) and a need on the other: environmental risk associated with corporates must be correctly evaluated.

The bank can play a relevant role as a resource allocator, offering credit line and allowing financial leverage, favouring the transition towards “low carbon economy”. On that point, the bank is trying to evaluate how is the carbon footprint implied in the loans portfolio. We started from the scientific consensus of the need of containing the global warming within 2° in the first half of the century. To this level correspond a precise concentration of GHG in the atmosphere, implying a path for future emission. On the basis of that and measuring the carbon footprint per sector, geographic area and single counterpart. This innovative model could help shaping commercial policies and defining portfolio risk.

In addition, UniCredit also promoted the development of an environmental identity of employees; with two main initiatives. The first is a section of firm’s intranet devoted to sustainable development issue that contains news and information on climatic change and on what each individual can do. The second is a subsidized loan to employees who decide to improve the energetic efficiency in their houses.

Industry and Sustainability

How to enhance Industry-Academia collaboration

- It is difficult to treat these last two topics separately. In fact the measurement issue is the key to fully embrace sustainability, here the collaboration between industry and academia can be particularly fruitful.
- If a shared measure of the depletion in stock of environmental resources would emerge, it should be obvious to include it in a formally calculable production function that serve as a guide to decision (by the firm) or evaluation on its financial viability (by the bank).
- On that also wider definition of well-being can be considered as a further option to estimate prices and attach values to the environmental features.
- The more accurate the measure the easiest would be to incorporate the correct risk measure in financial market prices, hence fully internalizing it.