DOES THE FINANCIAL SYSTEM PROMOTE SUSTAINABLE DEVELOPMENT?

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Abstract: In the aftermath of the global financial crisis that erupted in 2008 and the turmoil that followed in public finance field, sustainability has become a highly debated topic, both in business and academic circles. The crisis has highlighted the weaknesses of the financial system and reminded the whole world that its fundamental role should be promoting healthy and sustainable economic growth. This article aims to analyze the relationship between the financial sector and sustainable development and to provide solutions so that the financial system becomes a promoter of sustainability.

Keywords: financial system, sustainability, sustainable development, eco-efficiency, economic growth

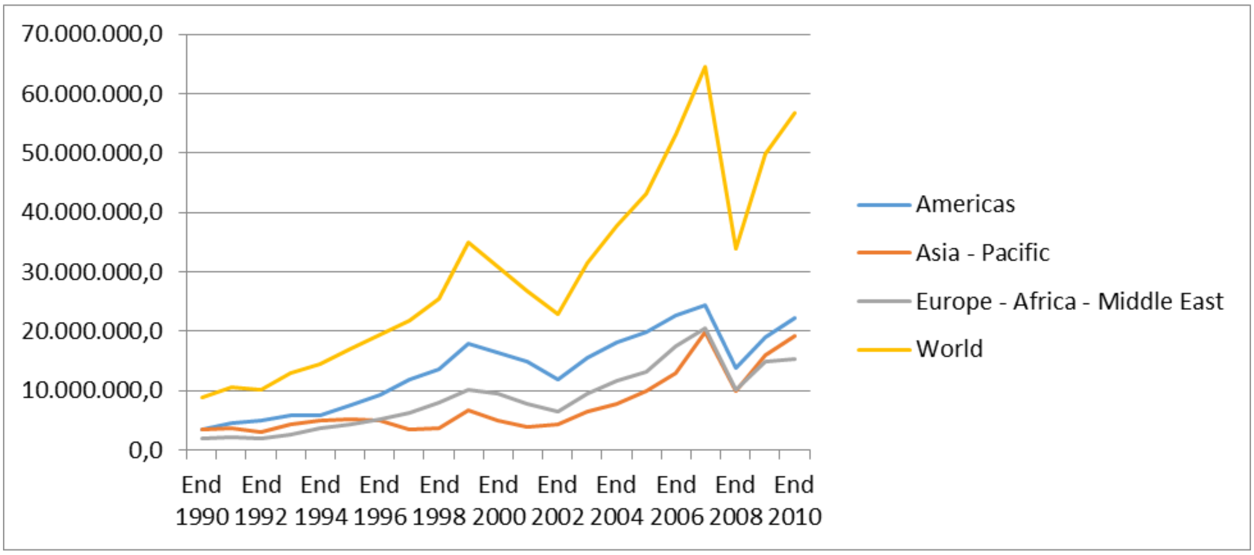
JEL Classification: G10, G15,Q01

Introduction

Due to the recent financial and economic context, the way that financial markets contribute to sustainable development has become a burning issue. Therefore, there are several questions that should find an answer: Is the global financial system a means to sustainable development, or on the contrary, it is a factor that works against it? Does the financial system determine a mentality through which financial markets are only aimed at the accumulation of short-term gains, which ignores human and environmental issues, or, on the contrary, it is a means to achieve goals on poverty reduction and environmental protection, and for ensuring sustainable growth?

All these are very important issues that require immediate solutions in the context of the unprecedented development of financial markets during the last three decades.

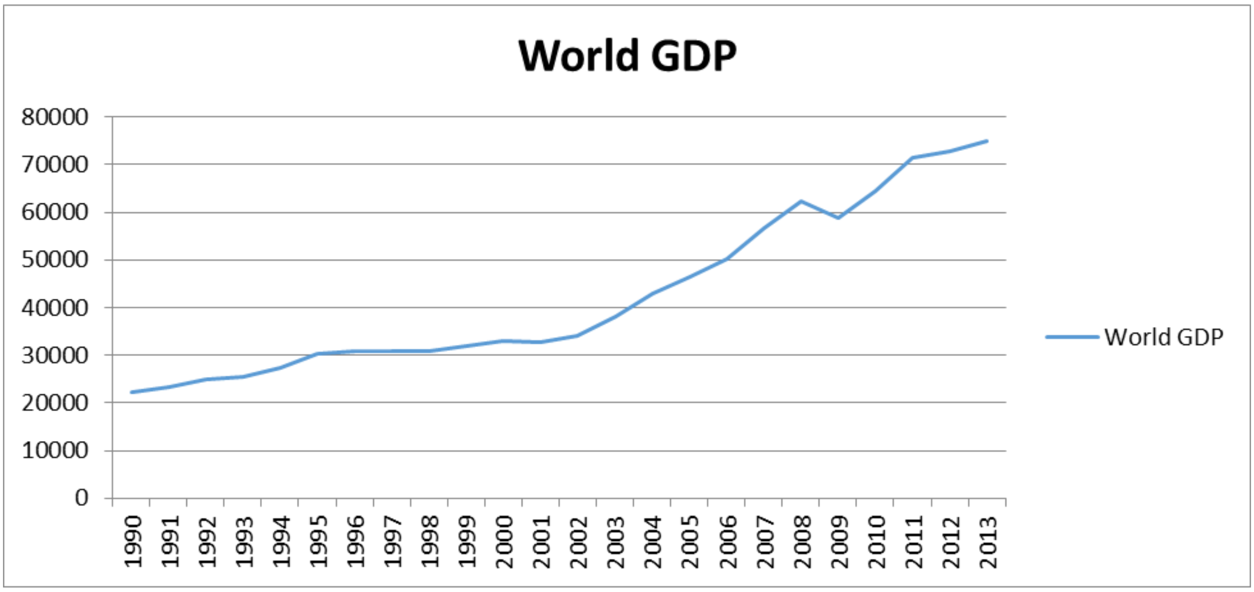
Figure 1- Market capitalization



Data source: World Federation of Exchanges, http://www.world-exchanges.org

The global equity market capitalization tripled between 1990 and 2000, from nearly nine billion dollars, to more than 30,000 billion in 2000, and followed an upward trend over the next seven years, so that in 2007 it amounted to 64.500 billion U.S. dollars, the historical maximum. Because of the financial crisis that began in 2007, the global capitalization decreased in 2008 to almost 34,000 billion, but the next year it started growing and reached nearly 57,000 billion at the end of 2010 (Figure 1). Despite these fluctuations, it should be noted that the volume of global stock market capitalization has increased more than six times between 1990-2010.

While the market capitalization tripled between 1990 and 2000, the global output increased by 46%, from 22,280 billion in 1990 to 32,209.3 billion in 2000. After this moment, the growth of global GDP accelerated, so that in 2008 it reached 61,350.6 billion, almost three times higher than in 1990. However, in 2009, the global production fell to 58,141.4 billion (Figure 3.9). Thus, while the global market capitalization increased more than six times within the period 1990 - 2010, the global production increased less than three times.



Data Source: World Bank, www.worldbank.org

The global equity market is only part of the overall financial system`s size. In mid-2007, the global derivatives market amounted to 457 trillion euro, about ten times higher than the global equity market capitalization, while the global market value of the bonds was about 55 trillion.

Given the impressive size of the global financial system relative to the size of the real economy, the following question arises: How should the global financial system be managed so that it promotes sustainable development?

Sustainability

The most popular definition of sustainable development is the one submitted by the "Bruntland Report": "Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their future needs". This definition contains within it two key concepts: the concept of *needs* and the concept of *limitations* imposed by the state of technology and social organization of the environments ability to meet present and future needs (Ebner and Baumgartner, 2006).

Sustainability involves creating alternative resources to substitute the rare ones, while mitigating the damaging effects on the environment. Therefore, the essence of sustainable development is maintaining a balance between resource consumption and availability (Olsson et. al, 2004). Reducing resource consumption can cause a slowdown of the growth process, so that it is desirable that growth is based on increased efficiency of lower amounts of resources.

At the microeconomic level, sustainable development is based on the concept of "eco-efficiency", which involves combining the ecological and economic efficiency, or maximizing the added value created in economic activity, while minimizing resource consumption, wastage and pollution (Yadong, 2013).

Sustainable development is closely related to human development, as all efforts to achieve sustainable development are channeled towards creating a balanced environment to enable people to improve their quality of life.

The tension between financial system`s nature and sustainable development

Many businesses are concerned, more or less, of issues regarding the environmental quality, resource depletion, or social responsibility, namely the determinants of sustainable development. However, development of eco-efficient activities involves the internalization of environmental and social costs, which reduces the profitability of companies. In their search for fast and consistent earnings, and under the pressure of market competition, many businesses prefer to be effective economically only, ignoring the determinants of sustainable development.

In the event that things would change in favor for sustainable development, firms would have to fully internalize environmental and social costs, while governments would be able to discourage pollution and overuse of resources by significant taxes, and to reward eco-efficient companies. If this should be the case, the global economic system would change significantly and the financial system should also change the standard of investment decisions, lending and insurance. In such a context, if a company succeeds in being economically profitable, then it surely would be eco-efficient. But the reality is different, and the financial system is generally less concerned with issues related to sustainable development.

However, global concerns for sustainable development tend to converge to the situation described above, but changes in this respect are different in intensity from country to country. As economic activity becomes more oriented toward sustainable development, financial markets should emphasize more the relationship between sustainable development and the financial quality of businesses, otherwise they could be exposed to risk (Schmidheiny and Zorraquín, 1996).

Thus, between the financial system and sustainable development there is a certain tension, which can be explained by the following:

- sustainable development has a multidimensional and holistic perspective (based on environmental protection, social equity and economic development), while the financial sector only seeks for high and rapid profits (Pisano et al., 2012).
- sustainable development requires long-term investment (future-oriented), while financial markets seek short-term gains (present-oriented);
- efforts to achieve eco-efficiency most often reduce a company`s present profitability in favor of future earnings, while financial markets favor companies with consistent present earnings;
- cost internalization of the eco-efficient activities affects their profitability, making them unattractive to financial intermediaries;

- sustainable development requires massive investments in emerging countries, while the players in the financial markets believe these investments are very risky and require very high yields;
- accounting and reporting systems cannot incorporate sustainable development risks and opportunities, and financial institutions make decisions based just on the information provided by these systems (Schmidheiny and Zorraquín, 1996)..

Therefore, developing eco-efficient businesses requires strategies on several years, and also the existence of strong and lasting relationships with stakeholders and funders. As in many companies the shareholding is fragmented and ever-changing, and as funders do not like to give their money up for long periods of time, the nature of financial markets does not seem to positively influence sustainable development.

The role of the financial system in promoting sustainable development

For the developing economies, creating a balance between the determinants of sustainable development and economic efficiency requires that the allocation of funds and capital formation promote eco-efficiency. This will lead to the integration of sustainable development factors in financial system`s reform programs and to the implementation of financial innovation. Given the high costs that developed countries pay to remove the effects of pollution, developing countries cannot afford to pollute at present under the assumption that they will remedy the situation in future. Therefore, the development of emerging markets should be directed towards sustainable development.

Many emerging countries have important reserves of natural resources, but often these are not used in accord with the concept of sustainability. Local and foreign companies often use them inefficiently, in their attempt to achieve rapid gains. Encouraging market participants and authorities to embrace eco-efficiency requires substantial support from financial institutions, both in terms of the funding process, and in terms of the influence they can exert on accelerating the process of change, as they may require the fulfillment of certain conditions to debtors.

In developed countries, the dissemination of information on the environment tends to become an important issue for regulators and institutional investors. By contrast, in emerging countries, companies do not publish information on the environmental impact of work their activity, as they generally attract the necessary funds by bank credit. As companies in emerging countries will resort to financing through the capital market, they will have to report on the environmental impact of their work, along with other information on the financial situation.

Moreover, few financial institutions in developing states consider potential investments to improve environmental quality and are familiar with the concept of eco-efficiency. Better informing on these issues could lead to the mobilization of financial institutions towards addressing the issue of eco-efficiency.

Difficulties in obtaining financing cumber the occurrence of clean production technologies and the most disadvantaged in this regard are small and medium enterprises, which face many difficulties because of the high cost of capital, or lack of adequate financial resources. Moreover, in emerging countries, where environmental regulations are more relaxed than in the developed ones, the principle of eco-efficiency is not given sufficient motivation (Schmidheiny and Zorraquín, 1996).

Traditionally, investments in green technologies are seen as a necessary cost to meet environmental regulations. Implementation and use of eco-efficient technologies in order to prevent wastage of resources and reduce environmental pollution has become a source of competitive advantages, requiring financial institutions to develop new perspectives, concepts and operational tools.

Developing economies have the opportunity to implement eco-efficient technologies that reduce the consumption of resources and pollute less, increasing their international competitiveness. However, for procurement of such technologies, they need financial support, and this is where the ability of financial intermediaries to assess development opportunities both in terms of economic efficiency, and in terms of eco-efficiency, has a great importance.

Implementation of eco-efficient technologies will result in significant reduction of costs on the performance of national environmental standards, but nevertheless, the costs of implementation can be prohibitive for small and medium enterprises, whose financial situation does not allow them access to long-term loans. Therefore, governments in developing countries often avoid tightening regulations on environmental protection, considering that many companies will not be able to fulfill them.

Investments in ecological production capacities are often financed through foreign aid, but such financing is reduced. However, the impact of these benefits may be relatively high, because foreign aid is often conditioned by the implementation of reforms.

The larger the anticipated risks for emerging economies are, foreign investors will be less willing to invest on the long run, and will require higher yields. Allocation of funds through aid programs help generating a positive outlook on the country concerned, and often leads to the unlocking of private capital flows.

Foreign aid can mobilize financial markets to promote eco-efficiency in developing countries through partnerships, financial reform, and privatization. Public-private partnerships between development agencies that allocate financial aid and private investors may determine the mitigation of risk associated to emerging countries and the appearance of profitable investments in eco-efficient technologies. On the other hand, the privatization of state owned companies in emerging countries may lead to greater resource efficiency and reducing pollution. Eco-efficiency aspects should be included in any negotiation and financing of privatization transactions.

Along with economic growth, large investment projects are financed more easily and at lower costs than small projects, even when the latter correspond better to sustainable development requirements. Often, the eco-efficient projects` financing faces many obstacles, while other investments may be advantaged simply because they promise an impressive profitability, not taking into account the sustainable development issues.

However, globally, there are several reasons for taking the necessary steps in reaching eco-efficiency:

- environmental regulations and penalties tend to be tightened;
- use of several economic instruments to encourage progress towards eco-efficiency;

- investors prefer to invest in eco-efficient companies that comply with environmental regulations, banks prefer to lend and insurance companies prefer to provide services to such companies, compared to firms that do not have a strategy for sustainable development;
- consumption of organic products tends to reach maturity, and public opinion weighs more for corporate decisions;
- media expansion makes any practice inconsistent with the sustainable development principles to be easily pulled out.

We cannot pretend that all the above are valid in every country, but they are some of the main motivations for embracing practices aimed to sustainable development.

Conclusions

Governments can encourage the implementation of eco-efficient technologies through tax exemption or reduction, or through providing grants and aid. However, these are not sufficient in the absence of an efficient financial system to support development. This requires, first, a change in the mentality, so that financial markets are seen to a lesser extent as speculation instruments, and greater in terms of the fundamental role they must meet, which is financing sustainable development. The creation of innovative financial products to help the companies comply with the sustainable development principles should be a priority for financial institutions.

Although the main objective of each financial entity is making profit, in recent years financiers` concerns for sustainable development have intensified. However, this is not the case for every country. The financiers` concerns for sustainable development are based on the fact that their risks are lower if they finance companies applying eco-efficient strategies. For example, a bank prefers to finance the activities of a eco-efficient company, since it is certain that it will not be called upon to pay heavy fines for pollution, and that will not affect the company`s ability to pay back its loan. In developing countries, however, it is difficult for credit institutions to encourage eco-efficiency of small firms, which represent, in most cases, the major polluters.

Similarly, insurance companies prefer to deal with eco-efficient firms, since their risks are lower compared to companies that are not oriented towards sustainable development. However, as insurers invest significant funds on the capital markets, it is their long-run interest to place these amounts of money in industries that reduce environmental risks that determine global warming, climate change and natural disasters, which, in turn, increase their risks.

Recent developments in the global financial system have shown that the financial entities` concerns for sustainable development is still too low. As their primary purpose is to develop faster and bigger gains, they have engaged in risky financial schemes, so that instead of promoting sustainable development of the world economy, they have endangered the stability of the global economic system.

We consider that, in the context of increasing concerns about sustainable development, the bio fuels and clean renewable energy industries have a great growth potential and players in the financial system should find it motivating to provide financial support for their development.

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