

Financing Future Growth: The Need for Financial Innovations

by

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Attracting long-term investors from the private sector or in public-private partnerships for stable long-term investment in the innovative sectors and industries needed to generate sustained growth is crucial. Long-term investors want assets that generate regular cash flows, often linked to inflation. While equities seem today less appropriate for long-term investors' needs, particularly in the context of the recent regulatory changes, inflation-linked bonds, very-long dated conventional bonds, project bonds or specific derivatives better meet their requirements. It seems highly likely that the expansion and increasing regulation of long-term investors in both developed and emerging countries will trigger the development of new financial instruments compatible with long-term investment. While long-term investors are the natural sources of growth financing, they are not necessarily capable of assuming all the associated risks. Establishing and/or developing national or supranational institutions that can partly assume or at least structure some of these risks and thus offer end-investors the products they need is therefore essential. Strict regulation of the new markets arising from this process will also be vital.

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I. Wanted: long-term investors to finance growth

Attracting long-term investors from the private sector or in public-private partnerships

It is hard to see how stable and sustained growth can be obtained without long-term investment in the innovative sectors and industries needed for the future, such as technology, the environment and renewable energy. But where is that investment to come from? The answer necessarily differs from one country to another. In a great many countries, especially in the developed world, severe constraints on public spending that have worsened since the crisis prevent governments from undertaking such investment on their own. Hence the importance of attracting long-term investors from the private sector or in public-private partnerships. In other countries, many in emerging regions, governments do have enough financial leeway to invest and are actually doing so, notably via sovereign wealth funds (SWFs).

Long-term investors want assets that generate regular cash flows, often linked to inflation

Either way, the investors who today are capable of making a long-term commitment – whether public or private – are characterised either by very long-dated liabilities (*e.g.* insurance companies, pension funds and some SWFs¹) or by an absence of short-term financing needs (in theory, the case for many SWFs²). If we are serious about getting long-term investors to finance growth, we need investment products that meet their requirements. But what are those requirements? Leaving SWFs to one side – their constraints are usually less demanding – long-term investors such as pension funds, insurance companies and even households clearly want assets that generate regular cash flows, often linked to inflation.

Recent regulatory changes strongly reinforce these needs, making long term investors very sensitive to short term losses

Recent regulatory changes in the form of IFRS and Solvency II are reinforcing these needs, as they oblige pension funds and insurance companies to match their liabilities with their asset portfolio on a marked-to-market basis (Blome *et al.*, 2007). This means they have to adopt asset-liability management strategies, often with a fairly long duration. In practical terms, this matching process may involve using a fixed income portfolio (with all the difficulties that implies, as it is not always easy to find appropriate bonds to cover very long-dated liabilities³), derivatives, or a mixture of the two. The concept of using fair value to measure assets and liabilities while integrating all their risk factors is obviously a significant advance in these investors' balance sheet management. But it is not without problems of its own that can actually hamper long-term investment. Quarterly or semi-annual analysis of the market values of assets and liabilities makes no distinction between short-term and long-term investment; it can force investors to rebalance their portfolios in a procyclical manner to meet their regulatory requirements, when their long-term objectives ought to permit purchases of less liquid risky assets. In practice, therefore, even long-term investors become highly sensitive to short-term losses. If we consider that their main distinguishing feature should be their ability to hold on to assets for a longer period than other market participants, and even play a countercyclical role during crisis periods, we clearly see the need to reflect on less severe constraints compatible with these characteristics.

II. Creating instruments better suited to long-term investors

Equities are less appropriate for long-term investors' needs

In the circumstances just described, all assets whose future cash flows are highly uncertain (equities in particular) are much less appropriate for long-term investors' needs. They offer little protection against inflation risk (Bodie 1976, Erb *et al.* 1995, Ang *et al.* 2011) and are extremely risky even in the very long term (witness the vigorous debate on time diversification, set out by Samuelson, 1994). Long-term investors' requirements are mainly concentrated in long duration assets generating fixed cash flows, and that usually cover inflation risk. So what instruments need to be developed?

Inflation-linked bonds, very-long dated conventional bonds, project bonds or derivatives could meet long-term investors' needs

The inflation-linked bond market is an obvious candidate, fulfilling the needs of many long term investors (Barnes *et al.* (2010)). Limited essentially to government issuers at the moment, it could be extended to corporates as well. De Jong (2003) has shown that many pension funds have had to invest in equities because of a lack of liquidity on inflation-linked, markets which are often far too small to meet these investors' requirements (even if liquidity conditions tended to increase in the past few years, Brière and Signori, 2009). A second candidate would be very-long dated conventional bonds. Most bonds available on the market have maturities of shorter than 30 years, and of these issues the majority are dated shorter than 10 years. An alternative to very long-term issuance would be a derivatives market able to match certain liabilities, hence the CME's 2009 initiative in favour of an 'ultra T-bond future overlay', aimed explicitly at the longer duration of pension funds' liabilities. A 'project bond' market designed to finance very long-term infrastructure and other projects could also be developed. Ever since the financial crisis, private companies have struggled to arrange traditional investment projects financed by banks and insured by monolines, as they now look too risky for many investors. International institutions such as the European Investment Bank have a key role to play in overcoming this difficulty, as they can structure or bear part of the product risk offered to long-term investors and thereby offer them a more acceptable investment solution. Currently limited mainly to infrastructure, this market could be extended to other research and innovation-based projects.

Asset Managers should also make better distinction between funds offered to long-term or short-term investors

For their part, asset managers offer very few funds specially designed for long-term investors, and little distinction is made between investors' investment horizons. The liquidity requirements of short-term investors, who can withdraw from a fund at any time, may penalise longer-term investors, who are not subject to these constraints and may be able to forego daily liquidity. A clearer separation between the types of funds on offer could take better account of long-term investors' needs.

The growth of long-term investors may trigger financial innovations, but some public risk sharing and strict regulation will be required

In the 1970s and 1980s, pension funds' requirements were the driving force behind a large number of financial innovations and new products, such as zero-coupon bonds, inflation-linked bonds and certain derivatives (Bodie 1991). It seems highly likely today that the expansion and increasing regulation of long-term investors in both developed and emerging countries will trigger a similar response. But while long-term investors are the natural sources of growth financing, we should bear in mind that they are not necessarily capable of assuming all the associated risks. Establishing and/or developing national or supranational institutions that can partly assume or at least structure some of

these risks and thus offer end-investors the products they need is therefore essential. Strict regulation of the new markets arising from this process will also be vital.

Notes

1. We could add households to this list, as increasing longevity and changes in the population pyramid are creating problems for pay-as-you-go pension systems. To an increasing extent, individuals are going to have to make long-term investment choices that generate regular cash flows over a lengthy retirement period in order to make up for inadequate state pension schemes.
2. Although short-term financing requirements may appear during crises, when the government may requisition these funds' assets to finance short-term debt (Bodie and Brière, 2011).
3. Note also that many insurance companies' liabilities include embedded options that cannot be hedged with a pure bond portfolio.

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