2018

Betting on the Long-Term

REBUILDING INVESTMENT FOR THE EUROPE OF TOMORROW

THE LONG-TERM INVESTMENT TASK FORCE OF THE PARIS MARKETPLACE
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Overview

The European Union (EU) is experiencing a paradox: more than 10 years since the eruption of the financial crisis, growth has finally returned – on the whole – but investment, and especially long-term investment, is yet to reach pre-crisis levels. However, the challenges facing the EU require an unprecedented long-term investment effort. This observation is all the more alarming as the structural forces holding back long-term investment will undoubtedly persist into the future.

Following the crisis, the priority of reforms was to shore up the financial system to prevent the emergence of new crises and to promote the return of confidence. At the European level, this priority given to financial stabilisation has been accompanied by the desire to favour the development of financing via the market to mitigate intermediated financing that has been perceived to have failed. Although financial stability is a prerequisite to an upturn in long-term financing, this alone will not suffice – as demonstrated by the persistent weakness of long-term investment (LTI) in Europe.

It rapidly became clear that the reforms adopted in the name of stability also tended to favour short-term behaviour and to penalise long-term investment. Given this scenario, targeted measures were adopted to rectify what was perceived as the undesirable effects of the reforms, yet such 'quick fixes' were ultimately of limited impact.

The hypothesis we are formulating is that, in the absence of a specific, coherent and comprehensive approach to long-term investment, the measures implemented have only been patchy and limited, and sometimes even inappropriate. In order to avoid the same pitfalls when formulating our recommendations, we are therefore proposing a simple yet robust and comprehensive definition of what long-term investment means at the essential level.

"Long-term investment is the financial investment strategy deployed by any operator holding stable resources which at the same time allows for and requires asset allocation able to generate an economic return over time."

On the basis of this definition, we believe that it is possible to create a favourable regulatory environment by applying a few simple principles:

Principle no. 1: Reposition LTI at the heart of public policy

Principle no. 2: Enable effective quantification of long-term risks and returns

Principle no. 3: Promote long-term asset & liabilities management

Principle no. 4: Promote the alignment of interests among the various operators around long-term objectives

Foreword

The report produced by the Long-Term Investment Task Force led by Gérard de La Martinière sets out a startling paradox which legislators and regulators have scarcely begun to appreciate.

On the one hand, the report highlights the considerable demand for long-term financing (in infrastructure, R&D and to face the immense challenges posed by digitisation, energy transition and the implementation of the circular economy), which, one might think, present an array of attractive investment opportunities for pension funds, insurance companies and European investment vehicles. On the other hand, the report also presents statistics that reveal chronic under-investment.

According to figures published by the European Investment Bank, investment in infrastructure lags some 20% behind pre-crisis levels. The effort in social infrastructure (education, healthcare and social housing) estimated at around 170 billion euros per year has significantly decreased and lies significantly below requirements, as stated by the high-level group chaired by Romano Prodi and Christian Sautter. The R&D effort of European companies is equally weak, and the EIB notes that in terms of the number of patent submissions, countries in Europe lag behind South Korea, Japan and the USA. In short, within the context of the digital revolution, the EU is suffering from a deficit of intangible assets compared to other economies of the world (Thum-Thyssen et al, 2017), whereas these very assets are crucial for productivity and growth.

However, the difficulties experienced by the financing mechanisms to meet the needs of the economy have not passed by policy-makers; they are simply struggling to come up with adequate responses.

Preoccupied by the dependency on bank credit, policy-makers in Europe are prioritising the development of market-led financing mechanisms. The project named Capital Markets Union (CMU) has the objective of better linking savings with investment throughout the EU and stimulating growth by providing SMEs (notably) and infrastructure projects with additional sources of financing. The European action plan of September 2015 incorporated a range of 33 action points and was supplemented in 2016, including initiatives in the areas of fintechs, sustainable finance and the Pan-European Personal Pension Product (PEPP). However, only a limited number have already been adopted.

Furthermore, and although recently softened to favour simple, transparent and standardised (STS) securitisation, the architecture of Solvency II[1] has led European insurance companies to withdraw from the securitisation market[2]. Under these conditions, only a few well-equipped operators have been able to replace it by direct purchase of bank loan portfolios, even though in this form such assets represent a high level of operational risk, the portfolios are not negotiable and do not benefit from any of the protection offered by securitisation.

Similarly, it should also be noted that insurance companies have withdrawn from equities investments to a massive and generalised degree. Their equities portfolios used to account for over 20% of their assets in Europe. Now this figure is tending towards 10%, a reduction of some 50% in little more than 10 years.

The Capital Market Union therefore does not appear to be leading to any significant progress vis-à-vis long-term investment, and market finance in Europe still shows itself to be incapable of providing the required volume of long-term financing.

[1] Solvency II is European legislation that defines the equity requirements of insurance and reassurance companies.
[2] Securitisation is a financial mechanism by which banks essentially transfer the long-term financing they have granted, notably to the real estate sector, in order to be able to finance new demands in the economy.

In the meantime, the traditional methods of financing are clearly being undermined by regulation. The 2017 study of financial structures produced by the European Central Bank reveals that the level of assets in the eurozone banking sector fell from nearly 400% of GDP in 2008 to just over 250% in 2016... a reduction of around 30%. This deleveraging is the result – to some extent desirable – of regulation.

Ultimately, it must be said that in spite of the extraordinary efforts taking place to revive economic activity paralysed by the financial crisis, notably via highly accommodative monetary policies injecting unprecedented levels of liquidity and significantly lowering the cost of credit to encourage investment, recovery remains moderate, especially in Europe, and has been accompanied by little investment. Unlike all other OECD countries, in Europe investment has thus far failed to recapture pre-crisis levels.

Looking deeper into this paradox and given the reduced effectiveness of the regulatory policies adopted, we become aware of a contradiction between economic and monetary policies, on the one hand, and investment, financing and financial risk control policies on the other.

It must, first of all, be stressed that current economic and monetary policies are even more accommodative than those preceding the subprime crisis and have led to the emergence of risks in the face of which the financial industry – unquestionably less robust than today – hit the rocks. It therefore comes as no surprise that the financial industry must once again confront similar dangers: attraction to inadequately remunerated risk, increase in public and private debt, asset bubbles, reduced intermediation margins due to persistently low rates, risks associated with unwinding accommodative monetary policy...

This is why, in spite of unprecedented strengthening of financial institutions' prudential constraints, confidence continues to be lacking among investors and supervisory authorities – whose constant addition of supplementary regulatory mechanisms (capacity to absorb losses, stress testing, continuity plans…) demonstrate that the economy is still at risk, and not that financial institutions are more fragile.

The continued rise in such risks combined with the tightening of prudential constraints prevent the financial sector from achieving levels of performance and resilience similar to those of other sectors in the economy (profitability, inadequate price/earnings ratios, NPLs, etc.), obstructing them from raising capital and mechanically reducing their role in the financing of the economy.

We are witnessing an accelerating vicious circle through which creating liquidity hardly benefits long-term investment and is struggling to generate sustainable growth. Quite to the contrary, it is accentuating risk and therefore uncertainty, leading to ever-stricter constraints being placed on long-term financial operators, namely banks and insurance companies, further reducing long-term investment.

In order to exit the vicious circle, rather than "throwing money at the problem", the overriding priority should be to structurally reform our economies. This notably means reducing budget deficits, excessive levels of indebtedness and balance of payment imbalances, the primary threats facing long-term investors.

At the same time, public policy must enhance the growth potential of European economies as this is a prerequisite for the ability to absorb existing debt and meet the challenges posed by international competition. In Europe this notably means reducing the cost of production and stimulating innovation… while at the same time developing proactive education and training programs designed to reduce the inequalities so frequently perceived as an inevitable consequence of modernising our economies.

Finally, it is necessary to explain and strengthen economic policy in order to systematically reduce long-term uncertainty. It would be a mistake to await market forces alone to deliver profound change (energy transition, circular economy, etc.), which require sustained public-sector effort. The uncertainties associated with such developments can only be attenuated through political power.

Long-term change frequently produces positive externalities that are not necessarily 'monetised', the benefits of which are not readily accessible to those who are expected to provide the finance. The right conditions for such long-term change can be provided by public power alone, via the combined effect of clear and coherent policies with stable incentives and structured information, or by tax policy which may redistribute, incentivise or dissuade.

For example, only the systematic provision of information on the climatic impact associated with investments or the strict management of carbon pricing by the public authorities is able to confront the considerable moral conundrum in which investors, entrepreneurs and project developers seek to maintain or increase their contribution to tackling environmental threats, to the extent that the cost of such threats is borne by others or by society as a whole and the risks only materialise over the long term.

Increasing long-term investment once again also requires the removal of numerous obstacles blocking the path of investors, notably those resulting from short-term prudential and accounting principles inspired by market operators' risk analysis approaches.

In general terms, financial institutions' risks are not market risks, even when their assets are acquired or sold on organised markets. Prudential and accounting standards should rather acknowledge that the long term does not entail greater risk, but simply presents a different risk profile!

Financial information on balance sheet securities (assets and liabilities) recognised at market value (mark to market), namely in line with the daily price movements on the markets at the heart of international standards forged by the IASB, impose unjustified volatility on the stable element of financial institutions' balance sheets. Such standards should therefore make way for the good sense and tradition that lead to recognising credits in the accounts at their historical contractual value and provisioned whenever payment default is anticipated.

It would also be a natural step to properly match the assets and liabilities on the balance sheets of insurance and pension organisations. Their assets are earmarked for honouring pension rights in 20 to 30 years; by considering them – due to their valuation at market value – isolated from liabilities, and over a very short-term horizon, accounting and prudential standards are inevitably leading assets being treated as a distinct entity alone in the interests of stability. And should one or other elements of the assets appear to be 'high risk' (i.e. the volatility that could occur in the event of the immediate liquidation of the insurance organisation), the holding of such assets would have to be discouraged by imposing sufficiently high equity constraints.

This context notably questions the choice in Solvency II of the 'horizon' of one year which leads to higher calibration of risk (and or regulated equity), whereas insurance companies are very long-term bodies for which daily market movements are of only limited significance. In practice, the obligation testing mark-to-market risks of balance sheet assets against unfavourable scenarios to which only operators in the financial markets are exposed, leads to insurance companies being discouraged from holding equities and long-term assets. However, such assets are fundamentally well suited to the nature of long-term commitments made by these institutions and represent a vital contribution to the sustainable growth of our economies.

The report issued by the Long-Term Investment Task Force provides an essential contribution by reiterating the urgency of refocusing our financial system on long-term economic challenges and by stressing that this is only possible where financial information and the analysis of risk take into account the specific nature of the risks in relation to their economic models and long-term investments. The risks are different from short-term market risks, and the continual rising of regulatory buffers in terms of capital and liquidity is not the appropriate response.

Jacques de Larosière

Introduction

Why are we publishing a long-term investment report in 2018?

Seven years ago now, following the National Conference on Long Term Financing (*Assises nationales du financement de long terme)*, this task force bringing together the participants in long-term financing in France issued its thoughts in an initial report and its conclusions remain still relevant today: long-term investment (LTI) is crucial for dynamic, inclusive and sustainable growth in Europe, and a proactive European policy in all aspects of the issue remains an absolute necessity if we are to reverse persistent economic frailties.

But what has changed over the past seven years is that long-term investment is now a European priority. As a result of the Green Paper on long-term financing of the economy, the launch of the Capital Markets Union project and the adoption of the Juncker plan, it occupies a central position within public policy and is giving rise to numerous initiatives.

Yet it has to be stated that European investment remains sluggish. It has only risen slightly since the crisis and remains below the considerable demands that our society and economy must meet (climate change, digital revolution, demographic and migration issues, upgrading of defence capabilities, developing a knowledge-based society, massive maintenance requirements, renewal and extension of infrastructure, etc.).

This paradox is the starting point for this report: although long-term investment is an issue currently recognised as strategic by political and economic decision makers, and while numerous measures have been taken to support long-term investment in recent years, the LTI deficit is persistent within the EU. How do we explain this paradox and how can the status quo be changed?

This is the question the task force members have sought to answer on the eve of European elections when citizens will be called on to select the Europe of tomorrow.

This report seeks to:

- Assess the long-term investment deficit in Europe based on some simple macroeconomic data;
- Inventorise the measures taken and assess them through the lens of long-term investment;
- Present an analysis of what constitutes LTI and propose an operational definition that derives from this analysis;
- Formulate recommendations – both general in the form of principles and illustrated with concrete examples applied to existing regulations.

Gaining a better understanding of LTI and radically transforming how it is understood by the regulatory authorities: this, in our opinion, is an urgent requirement for the European Union.

About the LTI Task Force of the Paris financial marketplace

Bringing together since 2010 the economic and financial operators of the Paris financial market involved in long-term investment (professional associations, various organisations, companies and think tanks)[3], the LTI Task Force led by Gérard de la Martinière[4] is an informal body for reflection and discussion which has contributed to the emergence of the LTI issue in France and at the European level.

An initial report produced under Mr de la Martinière was presented at the Assises Nationales du Financement de Long Terme (National Conference on Long Term Financing) held in Paris on 17 November 2011 and published by Documentation Française.

Since then the Task Force has been continuing its work on a regular basis, contributing to public consultations relating to the issue of long-term investment. It has notably worked intensively on the Green Paper of the European Commission on the long-term financing of the European economy, published in 2013.

This forum for reflection and discussion is novel in two respects: the diversity of its participants (financial operators, companies and associations) and the variety of subjects covered – both are testament to the richness of the LTI issue (banking regulation, insurance regulation, infrastructure financing, responsible investment, etc.).[5]

This multi-disciplinary working method enables current LTI issues to be placed against a long-term perspective, and to treat them via a decompartmentalised approach appropriate to the subject matter at hand.

[3] *Association nationale des sociétés par actions (ANSA), France Invest (ex AFIC), Association Française des Investisseurs Institutionnels (AF2i), Association Française des Entreprises Privées (AFEP), Association Française de Gestion Financière (AFG), Bpifrance, Centre des professions financières (CPF), CNP, Confrontations Europe, Covéa, Groupe Caisse des Dépôts, EUROFI, Fédération Bancaire Française (FBF), Fédération Française de l'Assurance (FFA), Fédération Nationale des Travaux Publics (FNTP), Forum de l'Investissement Responsable (FIR), Mouvement des Entreprises de France (MEDEF), Paris Europlace.*

[4] *The list of members is appended to the report.*

[5] *Diversity also characteristic of the European Parliament Intergroup on long-term investment and reindustrialisation.*

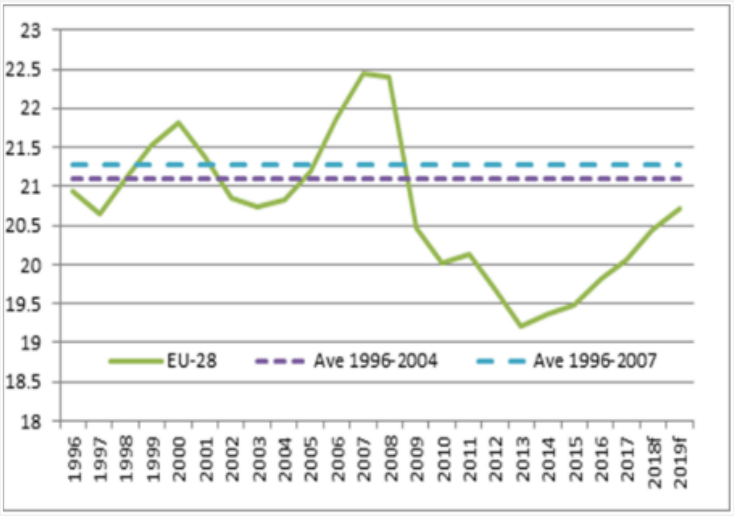
Part 1: Long-term investment in Europe – a persistent weakness

The European Union (EU) is experiencing a paradox: more than 10 years since the eruption of the financial crisis, growth has finally returned – on the whole – but investment, and especially long-term investment, is yet to reach pre-crisis levels (A). And this observation is especially true regarding long-term investment – understood, for want of a better alternative, via a sector-based approach (B).
However, the challenges indiscriminately facing the EU – accelerating technological innovation via the digital revolution, climate change, an ageing population, the inception of the knowledge-based economy, European security and defence requirements, etc. – demand an unprecedented investment effort, especially long-term investment (C). This observation is all the more alarming as the structurally negative forces against long-term investment will undoubtedly persist into the future (D).

A. Investment below pre-crisis levels

In Europe, investment is yet to recapture pre-crisis levels, whether in terms of euros or percentage of Gross Domestic Product (GDP) (Graph 1). The total amount of public and private investment (gross fixed capital formation) in the EU stood at 3,100 billion euros in 2017, the equivalent of 20.1% of European GDP, against 22.4% of GDP in 2007 (Eurostat, 2018a), despite an annual increase of 3.2% between 2013 and 2017 (EIB, 2017).

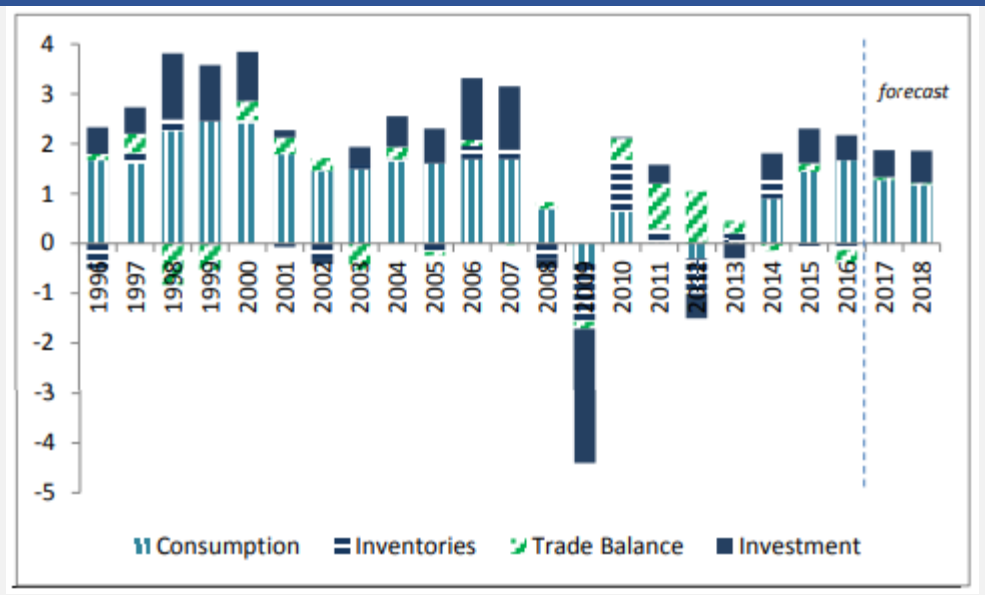
***Graph 1** Gross fixed capital formation EU28, in % of GDP (current prices)*



Source: Eurostat, DG ECFIN

This persistent weakness is an issue of major concern, as investment is one of the drivers of economic growth (see Box 1). Although European growth has recommenced (2.4% in 2017 and 2.1% estimated for 2018 according to figures published by the European Commission), **the contribution of investment to growth is lower on average than before the crisis** (see Graph 2).

Graph 2 *Contribution to GDP growth, EU28*



Source: European Commission, 2017, p. 6

Box 1: Investment and growth

Growth and investment interact through mutual enhancement or impairment (Figure 1); different effects can be distinguished:

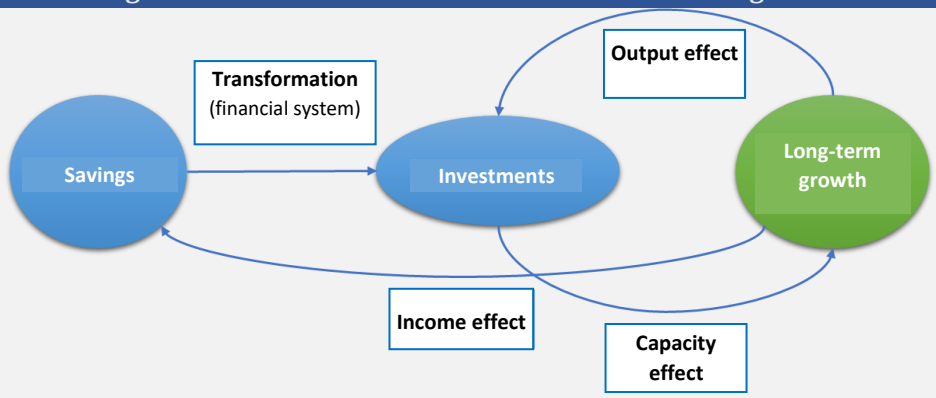
1/ *Capacity effect*: increased investment translates into higher productive capacity enabling increased production;

2/ *Output effect*: growth inversely leads to additional productive capacity requirements, generating investment.

3/ *Income effect*: growth generates income distribution which is partly saved. The savings generated can be *converted by the financial system* into investment that fuels the engine of growth.

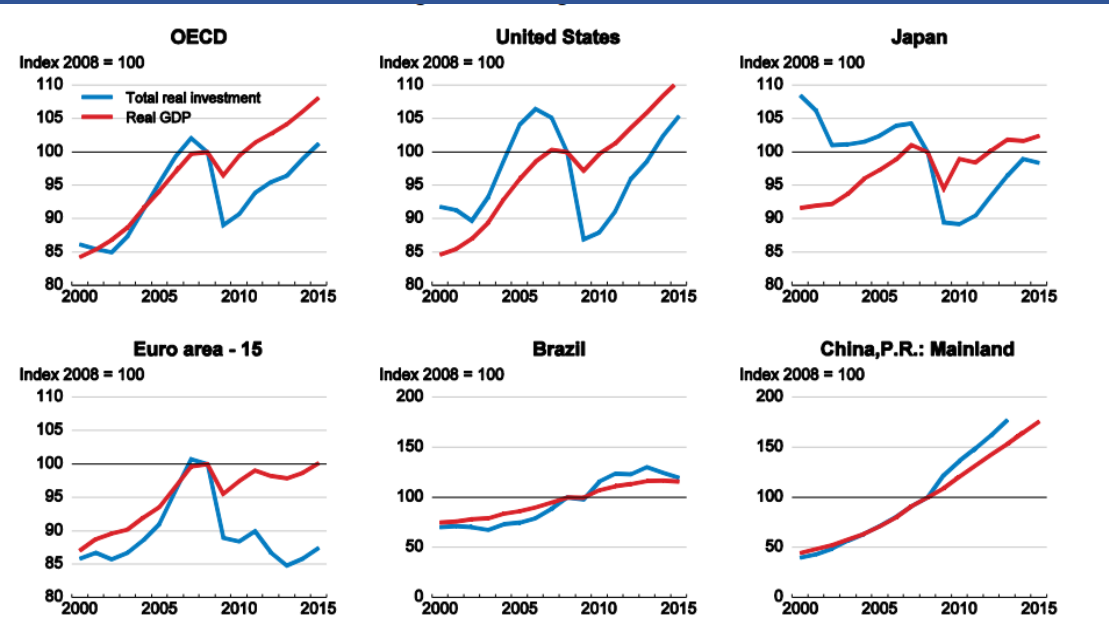
These effects are cumulative – in both an upwards and downwards direction.

Figure 1 : The interactions between investment and growth



This persistent investment weakness is unique to Europe (Graph 3), as the USA and other OECD countries excluding Japan have seen a net increase in investment since 2007. Investment levels in the OECD therefore returned to pre-crisis levels in 2014.

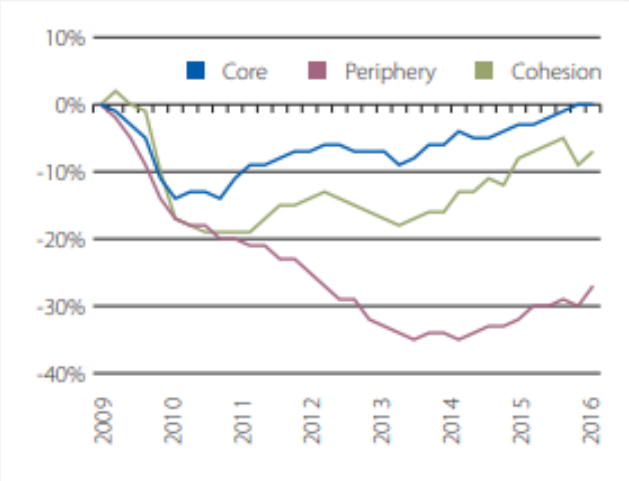
Graph 3 *Comparative changes in gross fixed capital formation, annual growth rate (%)*



Source: OECD, 2015, p. 208

Finally, although this weakness is characteristic of the EU as a whole (according to figures published by Eurostat in May 2018, investment has fallen in 24 countries out of 28 over the period 2007-2017), it varies by member state (Graph 4): investment levels in countries on the European "periphery" are 25% lower than in 2008, whereas investment levels in the "core" countries are slowly returning to 2008 levels. Overall, therefore, it is the countries experiencing greater economic difficulties that are also experiencing the greatest investment retardation.

Graph 4 *Investment by country groupings, relative change in % as at Q1 2008*



Source: EIB, 2016

Note: Gross fixed capital formation. Index: 2008 average = 100.
"Core": Austria, Belgium, Germany, Finland, France, Luxembourg, Netherlands, Sweden and UK.
"Periphery": Cyprus, Greece, Spain, Ireland, Italy, Slovenia and Portugal.
"Cohesion": Bulgaria, Czech Republic, Estonia, Croatia, Hungary, Lithuania, Latvia, Malta, Poland, Romania and Slovakia.

B. Particularly weak long-term investment in Europe

National accounting systems only measure investment (gross fixed capital formation), which in 2017 breaks down for the UE28 into 61.8% corporate investment, 13.3% public administration investment and 24.9% household investment[6] (OECD, 2018). It is therefore **impossible to directly and simply measure changes in long-term investment within our economies**. Yet to relativise the preceding observation, it is possible to use sector data on investment and to focus on investment in infrastructure, R&D and innovation – namely in sectors where investments are made on a long-term horizon. Generating highly positive externalities, investment in these sectors is crucial for long-term economic growth (see Box 2).

Box 2: Long-term investment and potential growth

Potential growth (or long-term growth) is the growth an economy may sustainably enjoy by fully exploiting its capacities without creating inflationary pressure.

Potential growth depends on technological progress (total factor productivity), growth in the labour input (population growth, development of human capital) and capital growth.

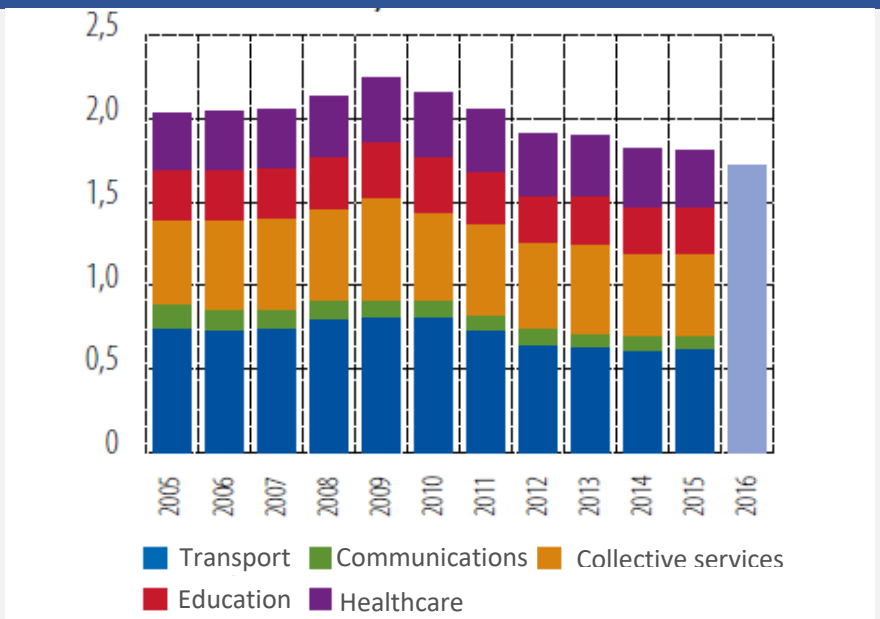
Long-term investment has a major impact on potential growth as it not only increases the quantity of capital, but also promotes innovation and enhances human capital.

This impact is related to the positive externalities it generates, namely the favourable impact it exerts on the economy beyond the private return it generates.

Infrastructure investment is 20% down on pre-crisis levels – at 1.8% of GDP (against 2.2% in 2009), according to figures published by the European Investment Bank (EIB) in 2017. The greatest contraction concerns transport infrastructure and is especially marked in countries with the lowest infrastructure quality.

[6] In national accounting, household investment equates to real estate investment.

Graph 5 *Infrastructure investment by sector (in % of GDP)*



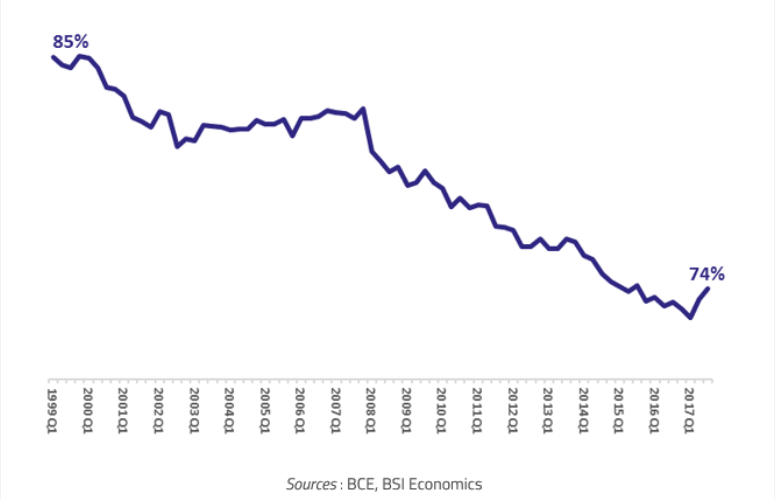
Sources : *Eurostat, Projectware, CEEP.*
Note : ***elements from the EIB infrastructure database. Data missing for Belgium, Croatia, Lithuania, Poland, Romania and the UK. The 2016 figures are provisional.***

Source: EIB (2017, p. 64)
NB: "Collective services" in the sense of "Utilities" (energy, water networks, etc.)

Investment in social infrastructure (education, healthcare and social housing) has been estimated at around 170 billion euros per year by the high-level group chaired by Romano Prodi and Christian Sautter. Largely spent by local authorities, this amount has reduced significantly (local investment in Europe fell by 12% between 2008 and 2015) and lays far below requirements (Fransen et al, 2018), while such investment is extremely important to maintain and develop human capital.

Investment by European investors in listed eurozone companies has also been decreasing since 2000, especially since the crisis. Shareholding among eurozone residents fell between 2000 and 2017 (Graph 6): to return to the levels of 2000, shareholding by residents would need to increase by 4,500 billion euros, which would only be possible if investment in shares by natural persons were to increase, whether directly or via financial intermediaries (BSI, 2018).

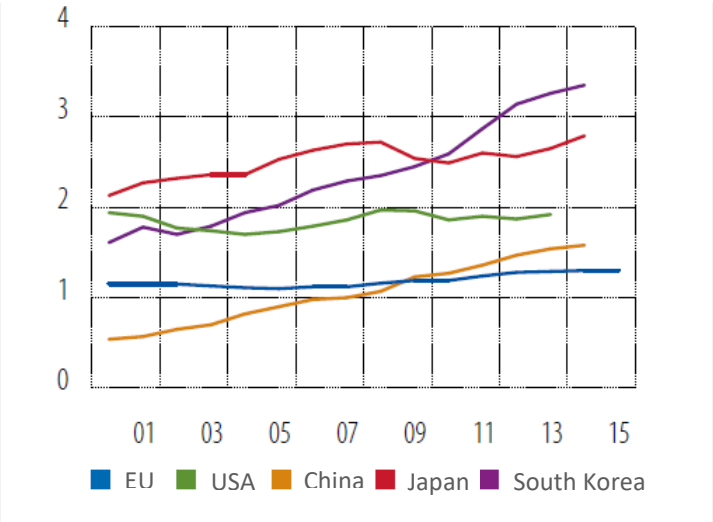
Graph 6 *Shareholding among eurozone residents*



Source: BSI Economics (2018)

Corporate investment in research and development (R&D) in Europe is structurally low compared to the levels achieved in other regions (Graph 7). The proportion of investment in R&D in Europe is lower than in other advanced economies: it accounts for 1% of GDP against 2% in the US and around 3% in Japan and South Korea (Veugelers, 2017). In terms of the number of patent submissions, European countries also lag behind South Korea, Japan and the US (EIB, 2017).

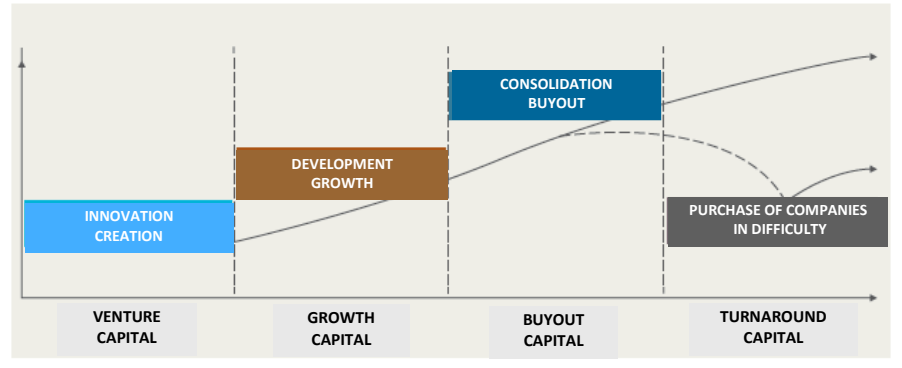
Graph 7 *Corporate R&D expenditure (in % of GDP) in the EU and other benchmark countries*



Source: EIB, 2017, p. 113

Another area of investment vital to the economy is private equity. This is a major source of ongoing financing for SMEs and unlisted companies (see Graph 8).

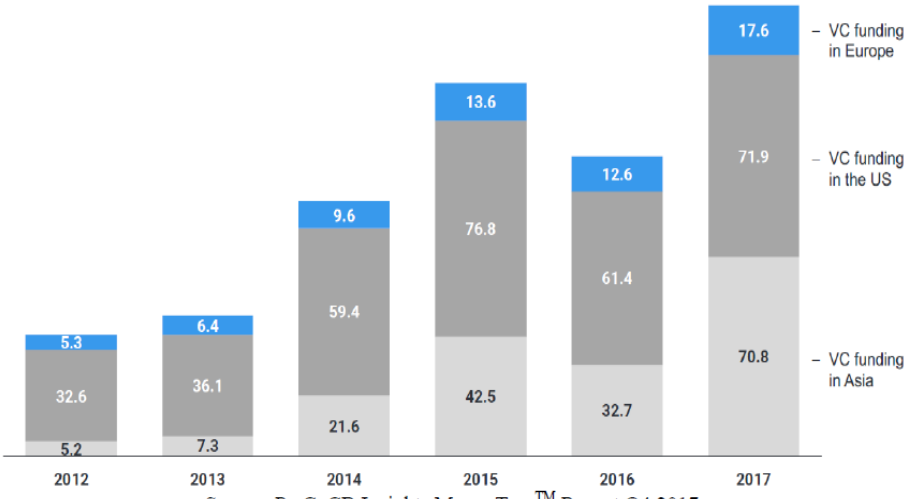
***Graph 8** The phases of private equity*



Source: FranceInvest, 2018

Although investment in the private equity cycle has recovered its overall level of 2007, it nevertheless remains disparate in different European countries and is even low compared to the investment of other advanced economies of the world. For example, a significant investment deficit exists in **venture capital investment**, which is nonetheless crucial to finance start-ups. The amount of venture capital investment in Europe stood at 17.6 billion dollars in 2017, against 71.9 billion in the US and 70.8 billion in Asia (see Graph 9).

***Graph 9** Total venture capital financing by continent, in billions of USD*



Source: PwC, CB Insights MoneyTree™ Report Q4 2017

The EU is therefore suffering from a deficit in intangible assets compared to other economies of the world (Thum-Thyssen et al, 2017)**, despite such assets being crucial for productivity and growth due to the positive externalities they generate** (Fournier, 2016).

C. Even though long-term investment requirements are rising

The EU is facing major challenges requiring a higher long-term investment effort: digitisation, development of a knowledge-based economy, population aging, climate change, depletion of natural resources, the challenges relating to migration and geopolitical risks… All of these issues call for massive investment in high-performance and durable infrastructure and in ambitious research. The rise of protectionism, the threat of trade wars and the strategic distancing of the US are all currently increasing pressure on the EU.

To take the example of **social infrastructure**, the Prodi-Sautter working group (Fransen et al, 2018) assessed the current financing effort in social infrastructure in the three sub-sectors of education, healthcare and housing as set against the financing requirements by 2030. It estimates that the investment effort should equate to a 25% increase in the proportion of GDP already dedicated to such infrastructure, i.e. an increase of €142 bn in investment per year (€1.5 bn p.a. over the period 2018-2030).

Table 1 *Investment amount and estimated gap in social infrastructure*

Sector	Investment (€bn per annum)	Estimated gap (€bn per annum)
Education & continuing education (0.43% of GDP)	65	15
Healthcare and dependency (0.5% of GDP)	75	70
Social housing (0.4% of GDP)	28	57
Total	168	142

Source: Fransen et al, 2018, pp. 40-41

In more general terms, the EU could face secular stagnation, i.e. a prolonged situation of low growth resulting from a sustained fall in investment, a reduction in the active population and rising savings (Gimdal et Karakas, 2016). The EU therefore needs to increase growth potential by investing in areas that offer most growth in total productivity, such as infrastructure and intangible assets (Aiginger et al, 2015; Gorning and Schiersch, 2014; Rubio et al, 2016; Van Ark, 2015).

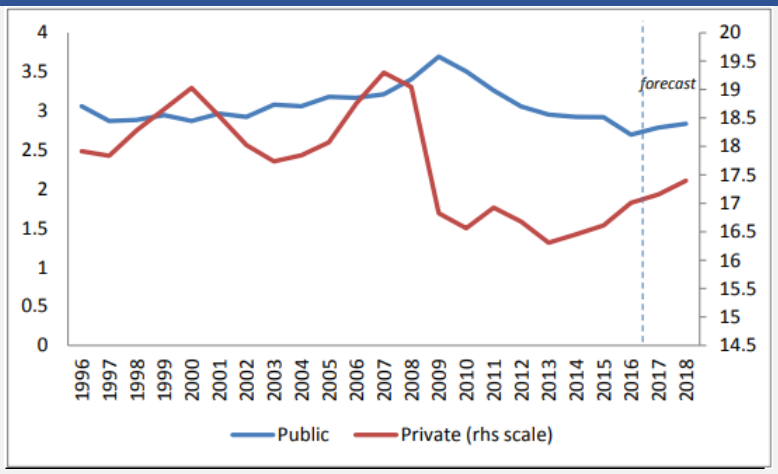
D. Major obstacles remain inherent to the European market

(1) Public-sector investment under significant constraints

The level of public-sector investment has markedly reduced in the EU since 2008, especially in member states that have had to conduct tax adjustment policies (European Commission, 2017a). Public sector investment as a proportion of GDP has therefore reduced from 3.4% in 2008 to 2.7% in 2016. With average public-sector debt at 81.6% of GDP in 2017 (Eurostat, 2018b), budgetary consolidation is set to continue. The most indebted European economies are those who have reduced their infrastructure investment budget the most.

In this context, an upturn in long-term investment cannot be principally based on the public sector and on classic programs of budgetary stimulus.

Graph 10 *Rates of public and private investment, in % of GDP, EU27*



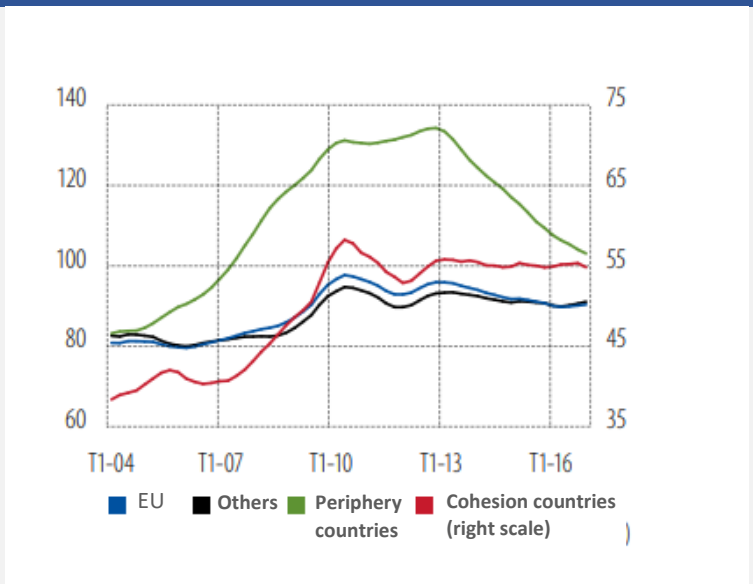
Source: European Commission, 2017, p. 7

Note: Hungary is excluded due to non-availability of data prior to 2001

(2) Private sector investment limited by debt reduction

Ten years after the crisis, companies are still in the process of debt reduction, with debt totalling some 90% of GDP in Europe (see Graph 11). Corporate indebtedness is therefore undermining investment (ECB, 2016), which partly explains the modesty of the recovery, despite highly accommodative monetary policies and budget policy – in spite of everything – that is slightly favourable overall. Corporate lending therefore continues to stagnate, despite the lower cost of borrowing. The debt reduction obstacle is especially high in the countries of the periphery.

Graph 11 *Corporate debt vs GDP*



Source: EIB, 2017, p. 233

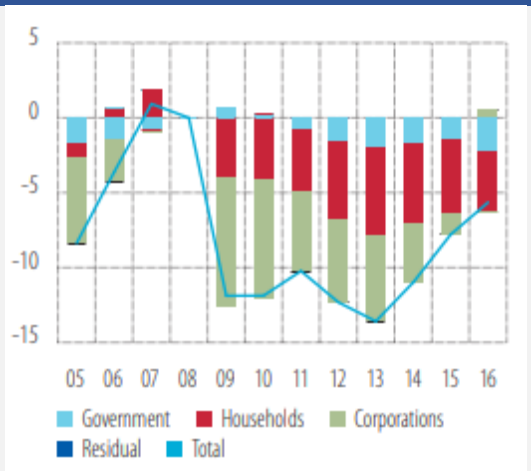
(3) Illiquidity premium crushed in an environment of low interest rates

In response to the crisis of 2008, the ECB implemented an accommodative monetary policy by lowering nominal and real interest rates to historically low levels. This monetary policy enabled the banking system to survive the crisis and prevented investment from collapsing. However, in the longer term, as the prospect of a liquidity crisis becomes more distant, it also produces certain ambiguous effects: the flattening of the rates curve does not encourage investors to place their savings over long periods – the illiquidity premium (i.e. the remuneration differential relating to assets being tied up for longer) has ultimately proven to be limited. Such wait-and-see behaviour may be exacerbated by persistently high levels of uncertainty – both macroeconomic and regulatory.

(4) High risk aversion among households

In terms of contribution to investment, the main reduction comes from households (see Graph 12). This reduction is not a function of the level of savings as European households save an average of 20% of GDP per year (Demarigny, 2015), but rather of the manner in which such savings are allocated. **In a context perceived to be uncertain, households show themselves to be risk averse and prefer to build up a savings buffer that is liquid to a great extent.** Furthermore, investment by households is to a large degree real estate investment.

Graph 12 *Contribution of each institutional sector to investment, in % change vs 2008*



Source: EIB, 2017, p. 26

Editor's note: For example, in 2016 investment was 6 points lower than in 2008 with a marginally positive contribution from corporate investment, and a negative contribution of around 4 points from households' investment and of 2 points from public sector investment.

(5) An uncertain macroeconomic environment

Finally, although the uncertainty measured as market volatility rapidly returned to normal levels after the crisis, indicators of 'political' uncertainty ("policy-related economic uncertainty") (Bakeret al, 2016) have remained high in the eurozone. Such uncertainty leads to a wait-and-see approach among economic operators, translating into a slowdown in growth among the most productive companies and by a reduction in their long-term investment in favour of lower risk investments aimed at producing short-term results (Bloom et al, 2014).

Conclusion

Overall, and as highlighted by the IMF vis-à-vis Europe (2017), economic and political uncertainty and the persistence of areas of weakness in the balance sheets of certain companies and financial intermediaries, combined with restricted access to credit, tend to favour investment in short to medium-term projects offering low yield and risk. Such forces slow down innovation and delay structural operations; they threaten to sustain a vicious circle of under-investment, stagnating productivity, downgrading of human capital and consistently low growth.

Part 2: Inadequate measures failing to support long-term investment

Introduction

Following the crisis of 2008, the priority of reforms was to shore up the financial system in order to prevent the occurrence of new crises and to re-establish a climate of confidence[7]. In Europe, the stabilisation of the financial system was accompanied by the desire to promote the development of market financing to mitigate intermediated financing, which was perceived to have failed (Song Shin, 2010).

Although financial stability is a prerequisite to the recovery of long-term investment, it is not sufficient alone – the persistent weakness of LTI in Europe is testament to this fact. Conversely, the persistent weakness of LTI is itself likely to negate the measures taken to re-establish financial stability.

It rapidly became clear that the provisions adopted in the name of financial stability, transparency and market confidence tended to favour short-termism and penalise long-term investment (A). Given this observation, targeted measures were adopted to correct what was perceived as the undesirable effects of the reforms, yet these 'patches' were ultimately only of limited effect (B).

A. Measures to support financial stability that ultimately undermine long-term investment

1. Measures focused on the short term…

(1) Widespread reference to market value

An initial pillar of the reforms related to the definition of value in international accounting standards.

'Fair value', defined as the "price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" (IFRS 13) **has become the reference value in the international accounting approach for financial assets.**

In theory, assessment of fair value may be based on multiple valuation techniques, such as the transaction prices in identical or comparable markets or the discounting of future cash flows. In practice, the first method is frequently applied and **fair value** is often **reduced to market value alone,**

[7] For the BIS (2012), the cost of financial instability in terms of growth and prosperity justifies giving priority to reforms that produce financial stability. According to the World Economic Forum (2012), the crisis highlighted the point to which financial regulations and risk measures were defective, imposing a cost on society.

which has become, via semantic shift, the reference accounting measurement, in spite of certain criticisms of its role in the financial crisis[8].

Intended to be applied to all financial instruments and all financial and non-financial companies[9], the IFRS 9 standard was developed by considering fair value through profit or loss to be the default measurement value, thereby extending the scope of fair value accounting to new financial instruments.

This extension via IFRS 9 of the application of fair value to a larger number of assets has led to higher volatility of balance sheets and income statements, as a function of market price movements when the accounts are drawn up.

Several empirical studies have shown that fair value through profit or loss increases the volatility of the accounting result (Novoa et al, 2009), leading to more volatility of results than the historic cost method (Barth et al,1995) and to more volatility in the measurement of banks' results than the amortised cost method (Bernard et al, 1995).

Fair value accounting has in fact proved to be defective during market volatility and instability by provoking artificial volatility of equity and long-term assets. Such artificial volatility is caused by market imperfection and sometimes inappropriate valuation techniques, exacerbated by short-term fluctuations in estimates within the financial markets (Jaggi, et al, 2010).

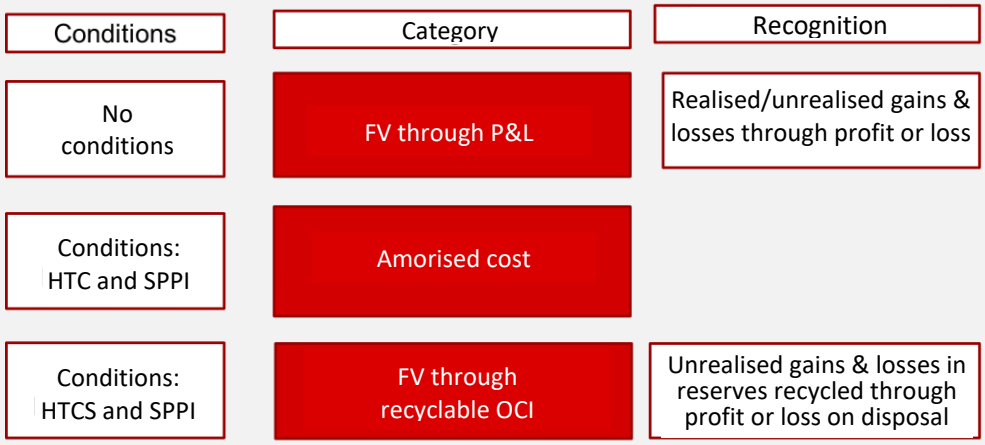
In practice, the IFRS 9 standard defines different options depending on the nature of the instrument and its mode of management.

Regarding fixed income products, the IFRS 9 provides for situations where such products are not valued at fair value through profit or loss. However, this only applies to 'basic' debt instruments whose cash flows are solely composed of repayment of the principal and interest on the outstanding principal (SPPI test: solely payment of principal and interest). Such fixed income products are then measured:

- **At amortised cost** if the management model is to hold the assets in order to collect their contractual cash flows (HTC: hold to collect);
- **At fair value** against other comprehensive income (OCI) if the management model is to receive both contractual cash flows and the proceeds from sale (HTCS: hold to collect and sell).

[8] Due to the procyclicality that fair value entails and the difficulty of using it in an illiquid market (see Allan and Carletti (2008) and Gorton (2008)).
[9] Banks, companies and investment funds have been under IFRS9 since 1st of January 2018, while insurers have a deadline until 2021 to implement the amendments to IFRS 17.

***Graph 13** IFRS9 treatment of fixed income products*



Source: Bachy, 2018

Accordingly, amortised cost accounting is compatible with an LTI model limiting itself to an investment strategy in certain fixed income products held up to maturity – which does not cover all of the realities of LTI.

Fair value accounting through OCI consists of recognising the unrealised capital gains or losses directly in other equity components, and realised capital gains or losses in profit or loss on sale. This accounting method certainly avoids causing volatility in the income statement while the asset is being held, yet **causes equity volatility** (via variations in unrealised profits or losses recognised in other equity components).

Regarding equity instruments, excluding securities held for transaction purposes (trading), the investor must choose to recognise them as of the initial recognition date, instrument by instrument and irrevocably, either in a portfolio measured at fair value through profit or loss, a source of income volatility, or at fair value through OCI, the variations of which do not affect income but equity without recognising capital gain or loss on sale (no recycling).

Accordingly, for equity instruments (shares) on the one hand, **the use of fair value through profit or loss produces income volatility that does not reflect the economic reality of long-term investment**, as the asset concerned is not immediately sold. On the other hand, **the use of fair value through OCI does not allow for measurement of the performance of a long-term investment** as the realised capital gains or losses on sale are never recognised in profit and loss, thereby clouding the performance measurement of such investments.

The impact of market value measurement is all the greater for prudential regulations having themselves generalised its use within their calculations.

- For example, in force since 2016, Solvency II measures capital requirements according to assets and liabilities **at market value** ("market consistent value" or "fair value"). This has meant a significant change for insurance companies as the majority of them had previously used other more stable methods to value premiums and provisions recognised in their accounts, such as historic cost and depreciated or amortised cost, which are now prohibited by the regulator (KPMG, 2017).

- Regarding the banks, the IFRS9 standard has had a direct impact on the results of ratio calculations: according to a study produced in 2018 by Mazard (Guillard, 2018) into the top 30 banks in the STOXX Europe 600 Banks index, three quarters suffered a negative impact regarding their CET1 ratio (-24 bps on average).

The prudential requirements (value at risk or expected shortfall) promoted by Solvency II and the CRR/CRD IV banking package **have proven to be highly volatile and therefore procyclical** (regarding the banks, see Jaggi, et al, 2010, Laux and Rauter, 2016 and Novoa et al, 2009; for insurance companies see Bank of England, 2014 and IMF, 2016).

The calculation method for capital requirements is such that financial market volatility has a direct impact on equity. To achieve their target solvency levels, companies will liquidate the components that require more capital, notably their financial assets, fuelling bear market tendencies. By encouraging investors to adopt pro-cyclical behaviour in order to comply with regulatory requirements, fair value accounting risks affecting financial stability by exacerbating systemic market risk (Plantin et al, 2008).

(2) Liquidity perceived as protection against risk

The corollary of the emphasis placed on instantaneous market value, liquidity has emerged as the cardinal value of a solid financial system.

An illustration of the importance placed on short-term liquidity can be found in the solvency measurements.

This illustration can be developed from the analysis of the **Solvency Capital Requirement (SCR)** which defines the amount of capital that companies must hold to cover the risks they carry on their balance sheets.

This amount is calculated on an instantaneous basis from the insurance company's closing prudential balance sheet in market value (exchange value for assets and transfer value for liabilities). The SCR is obtained by applying extreme valuations to the component parts of insurance asset and liability values. This calculation method therefore encourages especially volatile capital requirements as extreme momentary shocks are applied to balance sheet items which are themselves measured in market value at a given moment in time.

Furthermore, neither does it take into account the actions taken by the company's management which are nonetheless essential in assessing the real risk profile, ignoring the principle of continuity of management.

By way of example, this approach from a liquidity vision applied to annuity portfolios proves to be particularly inappropriate: the measurement of assets at market value does not offer any pertinent information as, on the one hand, liabilities are non-redeemable and bonds held as hedging are held until maturity and, on the other hand, assets could be transferred with the liabilities they are hedging if necessary.

The short-termist approach of SCR calculation is amplified in formulas and approaches used to calibrate shocks that penalise assets all the more that their duration is long. Such formulas reflect the

lack of consideration given to the phenomena of mean reversion or immunisation through management action – which are nonetheless essential regarding LTI. So, they especially penalise bonds, and all the more so that their duration is long, as well as equities by not taking dividends into account.

The bias on balance sheets in favour of liquid securities is accentuated by the liquidity ratios imposed on banks.

Prudential banking regulations gradually increase constraints on liquidity management by introducing various ratios (short and medium-term liquidity ratio and safety buffers for large institutions). The short-term liquidity ratio, the LCR (Liquidity Coverage Ratio), requires banks to hold more assets of less than one month's maturity than liabilities of the same maturity. To comply with this short-term ratio, banks must hold a sufficient quantity of 'high-quality liquid assets', i.e. those that could be easily sold due to the existence of deep secondary markets. They are therefore encouraged to skew their balance sheets in favour of these liquid assets to the detriment of less liquid investments that are important for the financing of the real economy (corporate debt, equity, etc.).

The reforms of market structures also increase requirements in terms of liquidity.

The reform of over-the-counter (OTC) derivatives markets has also given a central role to liquidity, even though their functioning has a direct impact on the long-term investment market. All OTC derivatives contracts must be cleared through a central counterparty. Contracts not liquidated in this way are subject to higher capital charges. However, long-term transactions cannot be easily exchanged through a central counterparty via derivatives (FSB, 2014).

Lastly, liquidity has also become the cornerstone of regulations covering long-term retail products.

Regarding open-end funds, the UCITS (Undertakings for the Collective Investment of Transferable Securities) V Directive of 2014 adopts the transparency principles of UCITS IV and adds greater investor protection in terms of liquidity management against the insolvency of the depositary and enhanced monitoring of UCITS liquidity. Following the financial crisis, regulators' concerns focused on market integrity and it became of paramount importance for asset managers to offer investors the stated liquidity.

Multiple mechanisms were introduced to protect investors against any reduction of the liquidity of their portfolio in the markets: swing pricing, notice periods, redemption gates, redemptions in kind, side pockets and suspension of subscriptions and redemptions for collective investment schemes.

The very concept of liquidity has also evolved, from being assessed at the level of the individual security to that of the portfolio; now asset managers must monitor changes in their portfolios' liquidity and make the necessary adjustments vis-à-vis the UCITS' liabilities. For example, UCITS may invest up to 10% of their assets in unlisted securities but, in practice, due to the liquidity requirements of such vehicles, this clause is rarely exploited.

Furthermore, under IFRS9, the mutual funds held are not considered as meeting the definition of SPPI and are no longer recognised as equity instruments (as they are redeemable). Accordingly, they cannot be recognised at fair value through OCI, but at fair value through profit or loss. Such single treatment

at fair value through profit or loss limits the advantages of mutual funds such as their management offering the investor performance over a contractually defined period, their fixed or variable distribution objectives or their objectives of realising long-term appreciation (Af2i, 2015).

(3) Risk measured and managed over the short term

In general terms, the prudential approach to the risks induced by market products favours short-term measures and management which is itself focused on a short-term horizon. For insurance companies and banks, the calculation of value at risk (VaR) encourages them to adopt short-term strategies. VaR implies that the investor must retain sufficient capital to be able to sustain the potential losses that the portfolio may incur in one year with a probability of 99.5% for insurance companies and in ten days with a probability of 99% for banks.

Consequences for asset allocation

The selection of a one-year horizon impacts the investment strategies, which greatly depend on the capital requirements resulting from the calculation of VaR. Yet the calculation of VaR at one year does not take into account the long-term commitments spread out over more than one year (Derien, 2010), nor the dividends that provide stable return while reducing volatility and the risk of securities overpayment (Aubry, 2017; Conover et al., 2016). More generally, management action that may be deployed over multiple years and straddling economic cycles, are insufficiently taken into account in the calculation of VaR (Aubry, 2017).

Consequences for financial markets

The use of VaR to measure risk encourages pro-cyclical behaviour in the market in opposition to the economic model of long-term investors and destabilises the economy. Such effects are all the greater for the financial institutions subject to these prudential standards being obliged to comply with them at all times, and not only at a given moment. In order to comply with the capital requirements emanating from VaR at a particular time, investors will have to take management decisions dictated by this instantaneous indicator, which could lead them to overreact to momentary variations and adopt sheep-like behaviour (all reacting in the same manner at the same time on the basis of the same indicators), thereby increasing systemic risk, liquidity risk and the risk of contagion.

2. Other measures penalising long-termism

With the primary objective of stability, regulations have concentrated on limiting risk-taking. But, in doing so, the regulator has penalised long-term investment which, with everything staked on the future, presupposes measured risk-taking (CEPS, 2013).

(1) Penalising long-term assets

The prudential or accounting weighting of certain asset classes which are a favoured mechanism for LTI has undermined long-term investment.

Prudential and accounting penalisation of equities

The strengthening of prudential regulations following the crisis has led to equities risk being weighted very heavily – in both the banking and insurance environment.

Equities are financial instruments that can be used for long-term investment purposes. They are perceived by the regulator as high risk even though they allow for portfolio diversification and provide a higher level of performance thanks to the risk premium. The Campbell and Viceira study (2002) also demonstrated that the **equities risk reduces as the retention period lengthens,** due to the inclusion of dividends, the upward trend and the likelihood of mean reversion.

Yet regulators have heavily weighted equities compared to other instruments.

By way of example, in Solvency II the capital requirement for equities (39% for Type 1 equities and 49% for Type 2 equities[10]) is close to the weighting for a bond with a B-rated counterparty (equating to a level of "highly speculative") and 5-year maturity (37.5%).

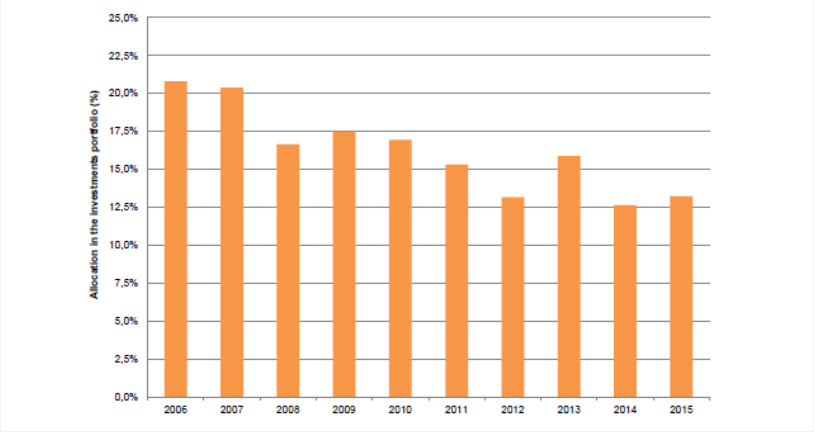
The same applies in CRD IV (Pottier, 2016, see p. 71). Under Basel III, the capital cost for bonds varies between 0 and 150% in accordance with the type of issuer and the rating of the security, whereas equities are weighted at 100% (i.e. 8% of the security).

As a result of their high-risk weighting, equities are losing their attractiveness in investors' eyes. The treatment of equities risk has had a direct impact on the proportion of equities held by long-term investors, as demonstrated in the case of insurance by the study of the Cahiers du Centre n°35 (Aubry, 2017), with both microeconomic and macroeconomic consequences. This also applies to banks, which have reduced their portfolios of long-term securities.

Such unfavourable treatment leads investors to withdraw from this asset class despite it being crucial for diversified long-term portfolio and, furthermore, necessary to support corporates, PMEs and mid-market companies (Breuer and Pinkwart, 2018). According to the aforementioned study (Aubry, 2017), insurance companies' allocations have fallen by 5 points. **With a total of €7 tn on European insurance companies' balance sheets, this fall represents €350 bn** (see Graph 14).

[10] Article 168 of Delegated Regulation (EU) 2015/35 defines Type 1 equities as those listed on regulated markets in member states of the European Economic Area (EEA) or of the Organisation for Economic Cooperation and Development (OECD), and Type 2 equities as those listed on stock markets of non-member states of the EEA or OECD, unlisted equities, commodities and other alternative investments.

Graph 14 *Proportion of equities investments among European insurance companies (excluding unit-linked portfolios, in market value)*



Source: Aubry, 2017, p. 4

Furthermore, the treatment under IFRS 9 of equities at fair value through OCI without offering the possibility of recognition in profit or loss on disposal and the treatment of mutual funds at fair value through profit or loss, combined with the application of IFRS 17 (the future insurance standard, the provisions of which in certain cases does not allow the volatility induced by these assets to be managed), could lead certain insurance companies to further modify their asset allocations to the detriment of long-term investment.

Prudential penalisation of infrastructure

More specifically regarding infrastructure, until 2015 **investments in the form of equities** for insurance companies and banks were weighted as other equities. The capital requirement concerning **infrastructure project debt** was also initially similar to corporate bonds and lending (e.g. under Solvency II, a weighting of 32.5% for a 25-year maturity with a BBB rating).

Such weightings did not take into account the risk profile of infrastructure projects, notably in terms of contract type (concession contract, private financing initiative, etc.) **or of their stage of completion, thereby excessively penalising this asset class. However, two revisions in 2015 and 2017 attempted to reduce the burden on this asset class** (see B.2 in this section).

Penalising securitisation

Securitised assets are heavily weighted in terms of capital requirement for both banks and insurance companies: Solvency II demands a capital charge of 10.5% for a Type 1 securitisation tranche rated AAA with 5-year maturity, and Basel III requires a current minimum tranche weighting threshold of 7% (Paris Europlace, 2015).

However, securitisation can be considered as a long-term form of financing as, on the assets side, it enables non-marketable assets to be converted into securities and, on the liabilities side, to safeguard the source of financing for the investor through guarantees.

(2) Penalising the transformation activities of banks

The various measures taken to limit risk have restricted the ability of financial institutions to carry out intermediation. Yet long-term investment presupposes the existence of operators capable of transforming stable liabilities into long-term assets.

The long-term liquidity ratio

Designed to limit the risk of a liquidity crisis due to a poor funding structure, the long-term liquidity ratio (Net Stable Funding Ratio) requires banks to finance long-term assets with stable liabilities.

Such stability is assessed on the basis of severe stress assumptions. Furthermore, it is the very original and essential intermediation and transformation role of the banks (taking in liquid and stable savings for investment in long-term assets) that is being undermined by the NSFR and how it is calculated. The NSFR promotes an approach whereby long-term liabilities finance long-term assets and short-term liabilities finance short-term assets. Banks are therefore being encouraged to reduce long-term loans (with negative consequences for the real economy) while competing with one another to take in deposits, which would consequently become rarer and less stable.

The leverage ratio is also threatening transformation.

The leverage ratio, namely the ratio of equity to risk assets, measures the debt capacity and robustness of a financial institution (BIS, 2014b).

In order to comply with the leverage ratio, the precise requirements and measurement of which are currently being finalised at the European level, European banks will be encouraged to accelerate the deleveraging process highlighted in the first section of this paper since, unlike US banks, they do not enjoy a semi-public securitisation market through the government agencies of Fanny Mae and Freddy Mac.

(3) Penalising research

With MiFID II, the costs of financial analysis will now be subject to the provisions applicable to management fees.

For discretionary management, although transaction costs may continue to cover execution and financial analysis, investor information requirements have been very significantly increased, and obtaining investor agreement *ex ante* for the research budget has been made mandatory – which, in addition to the administrative burden of the system, encourages a highly rigid approach over time; the system has in fact been extended to collective management as it is very difficult to have different regimes operating within a single portfolio management company. Consequently, many management companies have preferred to offset analysis costs against their margin. But in doing so, there has been a reduction in amounts devoted to financial analysis, notably among the smallest management companies. Furthermore, financial analysis has to be allocated by portfolio and cannot be pooled – to the detriment of research dedicated to SMEs and mid-market companies. Overall, these requirements tend to limit research budgets, despite its vital importance for long-term investment strategies.

B. Targeted corrections unable to stimulate LTI in Europe

1. The Green Paper on long-term financing and the Capital Markets Union (CMU)

Once adopted, generally after a long gestation period (from conception to adoption, the Solvency II Directive required nearly fifteen years' preparation), the regulations applicable to financial operators have had to be adapted to take into account their possible negative impact on long-term investment.

Such modifications notably took place following the **publication of the Commission's Green Paper** on long-term financing in 2013. The European Commission then produced a **road map** in response to the financing requirements of the European economy, adopting a package of measures designed to promote the adoption of 'novel' methods for releasing long-term financing and facilitating the return of growth in Europe.

The road map led to the launch of the CMU, a project which, in practice, is designed to provide companies with additional financing solutions in a context of the relative reduction in the share of bank financing. In support of this objective, the European Commission identified 5 concrete priorities:

- Facilitate PMEs' access to capital markets;
- Widen PMEs' investor spectrum;
- Boost the securitisation market;
- Stimulate long-term investment;
- Develop private sector investment.

Accordingly, the Green Paper and the CMU are the drivers of change that has taken place at the European level to stimulate long-term investment, notably by proposing an investment stimulus program (2) and by introducing legislative amendments (3). Although laudable, such initiatives are still incomplete if LTI is to be truly re-energised within the European market.

2. European budgetary instruments of a new kind, although yet to be fine-tuned

To invigorate investment, the EU has implemented a **vast stimulus program**, the Investment Plan for Europe ("Juncker Plan"), launched in 2015.

Previously, the European budget largely consisted of subsidies with few financial instruments (debt, guarantees or participations). In a context of debate surrounding the effectiveness of public investment following the crisis, the Commission sought to progress from the mindset of subsidies to further exploit, wherever possible, financial instruments to fund profitable long-term investment projects.

The development of financial instruments within the European budget, of which the Juncker Plan is the most emblematic example, fulfils the desire to optimise the use of limited budgetary resources: projects selected in line with economic and financial principles, possible recycling of resources used (where the guarantee is not used, the loan is repaid or the equity interest sold), leverage on additional resources mobilised by long-term investors (a leverage effect of 15 under under the Juncker Plan assumptions). Accordingly, with a budget guarantee of €26 bn in 2017, the plan should generate total investment of €500 bn by 2020.

This new public expenditure approach has had a real impact on investment – as of 1 January 2018, the first phase of the plan led to the approval of 898 operations, which should generate 335 billion euros of investment in all 28 member states of the EU – two thirds of which from private funds (ICF, 2018).

However, more detailed analysis of the financed projects leads to a somewhat more nuanced observation. **Firstly, some of the projects would have been financed without the Juncker Plan (no additionality).** Furthermore, most of the projects that have benefitted from the plan relate to the financing of SMEs or certain large infrastructure projects; **yet the financing of R&D, intangible assets, transport infrastructure and small infrastructure projects has remained limited** – whereas these are the projects experiencing the greatest difficulties in obtaining funding and which offer the most externalities. **Lastly, certain sectors have largely remained outside the scope of the financing granted under the plan** (e.g. social infrastructure accounts for just 4% of the investments and defence, in which the EIB – responsible for managing the fund – may not invest). More generally, **the Juncker Plan has enabled more projects to be financed more quickly, but has not fundamentally changed the type of projects being financed – whether in terms of size, sector or risk level.**

This lack of any real re-orientation in financing is notably a function of the difficulties encountered by the EIB, in spite of its best efforts, to take more risks under EFSI than in its own right. Furthermore, the capacity of public sector long-term investors to effectively contribute to putting forward project proposals which may be eligible for the Juncker Plan, notably small projects, is limited to the extent that such institutions cannot directly enjoy the Juncker guarantee.

As a result, 'market flaws' persist in the sense that projects that perfectly fit the Juncker Plan are structurally disregarded by the mechanism. Beyond large individual trans-European projects naturally targeted by the EIB, the main potential lies in small or medium-scale operations – high risk but viable if long-term financing under attractive terms renders them solvent. Such projects cannot access the guarantee fund as it currently operates. They are therefore both outside the market and outside the scope of the Investment Plan for Europe.

Bringing together projects of more modest size within a portfolio-based approach, investment platforms are at least in theory able to counter this issue. Yet the constraints described above make very laborious work of establishing such platforms beyond experiments on a case-by-case basis.

The InvestEU project presented by the Commission within the context of the presentation of the multi-annual budgetary framework constitutes an attempt to get around such limits but will not be implemented until 2021.

3. Amendments made to the main regulations

As a logical progression from the CMU and Green Paper, certain amendments have been made to European regulations since 2014 to attenuate the effect of international standards on European operators and to ensure that long-term issues are taken into account. In this context, the Commission has also asked for impact reports to be produced for each regulation regarding long-term investment, notably from EFRAG and EIOPA, which has led to the adoption of additional measures.

(1) New derogations to support long-term commitments

Within the context of the Omnibus II Directive, multiple amendments ('long-term package') have been made to the initial wording of Solvency II in order to take the long term into consideration when assessing insurance companies' liabilities commitments and attenuating the artificial impact of short-term movements in the financial markets on the prudential balance sheet, notably on equity.

The long-term package notably provides for extrapolation to a stable ultimate forward rate on the risk-free rate curve used to discount commitments, the volatility adjustment (VA) and the matching adjustment (MA).

EIOPA must provide insurance companies with a **risk-free rate curve** for each currency on a monthly basis. The curve is established using the market prices of financial instruments for the so-called liquid element of the curve (the part corresponding to rates observed in integrated, liquid and transparent markets). Regarding longer periods beyond the last observable liquidity point (established at 20 years), the curve is projected using an extrapolation method to the ultimate forward rate in order to stabilise the valuation of long-term liabilities.

The regulator has introduced two contra-cyclical measures to combat balance sheet volatility: **the volatility adjustment and the matching adjustment.** Together, they counterbalance the effects of short-term asset volatility by adjusting the risk-free rate curve used to value technical provisions. Adjustment of the rate curve is based on the observed variance between the risk-free rate curve and the bond spread of a portfolio that is representative of European insurance companies' investments for the volatility adjustment; and based on the observed variance between the risk-free rate curve and the bond spread of the insurance company, presuming a near optimum matching of assets and liabilities, for the matching adjustment.

However, although these mechanisms protect balance sheet equilibrium from the volatility of spreads, they do not shield them from other sources of financial volatility.

Admittedly, the long-term package has limited to a certain extent the equity volatility on balance sheets, yet the regulator has not taken the approach to its logical conclusion as capital requirements for long-term investments have not been modified.

Regulating the OTC derivatives markets, EMIR[11] was amended in 2017 to enable pension funds to be exempt from the clearing obligation for their OTC derivatives transactions, which was threatening to overwhelm their economic model as a long-term investor.

Under EMIR, pension funds as "pension scheme arrangements" were obliged to take part in central clearing for derivatives, effectively requiring pension funds to convert assets into liquidities. Yet by definition, pension funds have limited funds in liquid assets or cash. The amendment to EMIR in September 2017 exempts pension funds and other concerned counterparties from the central clearing obligation for a period of three years, which may be extended by two years, in order to implement a

[11] Regulation (EU) 648/2012

durable solution. Accordingly, this amendment enables pension funds and policyholders to save up to 1.6 billion euros according to a 2016 impact study produced by the European Commission (European Commission, 2017b).

(2) Targeting the softening of capital charges

The CMU action plan is committed to facilitating infrastructure LTI by addressing the issue of prudential requirements.

Having noted that regulation is undermining the entrance of insurance companies into the infrastructure market, despite their position as natural long-term operators, in 2015, via **Delegated Regulation 2015/35 of Solvency II,** the Commission proposed a reduction in equity requirements for infrastructure by creating a new asset class: **qualifying infrastructure investments.**

In the same vein, a second delegated act of Solvency II covering 'eligible infrastructure companies' was adopted in June 2017 to reduce the capital charge on investments made by insurance companies in entities or companies whose income is mainly derived from operating, financing or developing infrastructure assets.

Such investments therefore attract a lower capital charge:

- **In the form of equities,** investment in qualifying infrastructure is weighted at 30% instead of 49% and at 36% for eligible corporate infrastructure equities.
- **In the form of debt,** the capital charge on the investment in qualifying infrastructure debt is reviewed in light of the rating (e.g. it falls to 22.85% for infrastructure debt from 32.5% with a rating of BBB with 25-year maturity, and to 22.88% for corporate infrastructure debt).

Furthermore, **investments in qualifying infrastructure held within European long-term investment funds** (ELTIFs) are weighted at 36% instead of the previous 49%.

Nonetheless, in order to benefit from the lower weightings, the assets concerned must meet a set of cumulative criteria which are difficult to satisfy in practice, thereby considerably limiting application of the reduced capital charges.

Regarding the banks, the CRR package proposes the softening of capital requirements for certain infrastructure project financing: a factor of 0.75 (subsection 1 of Article 501a of CRR) may be applied to the results of internal or standard credit risk models in order to reduce the capital charges for infrastructure projects that meet a list of conditions (along the model of the SME factor). It also provides for reviewing the calculation of capital requirements for financing in eligible infrastructure companies, as already done for insurance under Solvency II.

However, the conditions for benefiting from the factor are too restrictive and are not appropriate for the range of infrastructure projects that exist, nor do they enable most project financing to be eligible. For example, renewable energy financing, a proportion of the income of which depends on market prices, cannot claim preferential treatment. Furthermore, the system does not allow any offsetting of the negative impact of higher regulatory requirements resulting from the new Basel agreements signed in December 2017 (see below 3(3)). Ultimately, a lower volume of structured loans from banks to finance infrastructure projects is anticipated over the coming years.

The 'CMU package' also includes legislative initiatives to promote long-term securitisation.

Two proposals have been put forward by the CMU in order to bring the benefits of securitisation back to the fore: a proposal for a Regulation[12] which sets out the common rules for securitisation and introducing a European label for "simple, transparent and standardised" (STS) securitisation transactions that should enjoy lighter prudential treatment and a proposal for target review of CRR[13] introducing more flexible rules for STS securitisation transactions. In December 2017 these two proposals were definitively adopted by the European Council and Parliament[14], to come into force in 2018 with implementation from January 2019.

A Delegated Regulation for insurance was also implemented on 1 June 2018 to adapt Solvency II to these new rules (by amending Delegated Regulation (EU) 2015/35 regarding calculation of the regulatory capital requirements for securitisation and simple, transparent and standardised securitisation instruments held by insurance and reinsurance companies, announced during the mid-way examination of the action plan for the UMC (COM (2017) 292 final).

These proposals introduce a review of the capital charges associated with securitisation investments. Preferential treatment will be allowed for securitisation instruments considered to be of high quality under multiple criteria, including tranche seniority and credit quality. Accordingly, the Regulation defines a high quality securitised investment class based on characteristics concerning the structure of the transaction, asset quality, the subscription process and investor communication. A senior security rated AAA will be subject to a capital requirement of between 7 and 10% if it qualifies for the STS label and 15% otherwise.

In addition to the new label, a number of additional criteria have been introduced: the liability of the transferor for the asset credit risk is increased, a concentration criterion has been created, centralisation of information concerning asset pools must take place via a platform and an obligation will be introduced to prove that the transaction contributes to the real economy.

However, such advances designed to stimulate securitisation remain limited. The recalibration for products eligible for the STS label only favours traditional AAA-rated securitised products, while the label must be certified by the transferor who therefore incurs additional liability. Furthermore, although the Regulation has lowered the single floor for securitised products eligible for the STS label to 15%, this weighting inadequately takes into account the quality of the underlying assets and the structure of the product (FBF, 2014). Products with a low or zero default, which covers the majority of securitised products on the European market, also find themselves being severely penalised by these new measures (Vellien, 2017).

Excluded from eligibility to the STS label are the securitisation sectors that are most attractive in the market, notably synthetic balance sheet structures that enable risk to be transferred. Accordingly, the STS rules do not take into account the benefits of banks' capacity to finance the economy (FBF, 2017).

[12] Proposal for a Regulation by the European Parliament and the Council establishing the common rules for securitisation and a European framework for simple, transparent and standardised securitisation transactions, amending Directives 2009/65/EC, 2009/138/EC, 2011/61/EU and Regulations (EU) no. 1060/2009 and (EU) no. 648/2012, COM/2015/0472 final.
[13] Proposal for a Regulation by the European Parliament and the Council amending Regulation (EU) no. 575/2013 of the European Parliament and the Council concerning the prudential requirements applicable to credit institutions and investment companies, COM/2015/0473 final.
[14] Regulation (EU) 2017/2402 and Regulation (EU) 2017/2401.

Regarding the CRR II package, in addition to various technical measures[15], **other targeted capital charge softening measures will be introduced to ensure better long-term financing of the economy.**

Regulators will significantly correct **capital charges for credit risk** in the standard approach by lowering the weightings of bank exposures and companies rated A and B, in addition to a **preferential weighting for SMEs and covered bonds** (ACPR, 2017).

However, such reductions only target certain types of asset while other measures under discussion (see (4)) continue to penalise long-term investment. In the absence of a global approach to the various dimensions of long-term investment, the measures taken cannot create a real framework to promote it.

(3) New requirements to encourage long-term shareholder engagement

The Directive of 17 May 2017[16] on promoting long-term shareholder engagement (the so-called "shareholders' rights Directive") **is designed to encourage institutional investors and asset managers to become more engaged over the long term.**

This Directive introduces several measures inspired by the Stewardship Code of the UK's Financial Reporting Council, notably by requiring institutional investors and asset managers to publish an engagement policy and to issue an annual publication stating how the policy has been implemented and their votes cast accordingly. However, institutional investors and asset managers may decide not comply with one or more of these requirements, but must then publish a clear and justified explanation ("comply or explain").

Institutional investors are also subject to additional obligations and must notably publish the main elements of any agreement entered into with an asset manager.

Asset managers must report to institutional investors on an annual basis, stating how their investment strategy and its implementation comply with the agreement entered into, and how they contribute to the assets' medium and long-term performance. They must also communicate information on the main risks, portfolio rotation, the use of voting consultants, etc.

However, the Directive does not impose any new constraints in European countries such as France, where such measures were already in place.[17]

(4) Uncertainty relating to the transposition of Basel III into European standards

Basel III may be transposed to the detriment of long-term investment and, in part, cancel out the positive effects of certain amendments made to the current framework.

[15] Authorisation of the loan splitting approach, lower weightings for income-producing RRE and a new wider definition of mortgages, to include exposures guaranteed by institutions (secured loans).
[16] Directive (EU) 2017/828 of the Parliament and of the Council of 17 May 2017, amending Directive 2007/36/EC in order to promote long-term shareholder engagement.
[17] Article 173 of the energy transition law for green growth.

One of the main pillars of the Basel III accord of 7 December 2017 covers internal models for calculating weighted risk. **In order to limit the diversity of risk measurement, various provisions cover the use of internal models** (see Table 2): prohibition on using internal models for certain types of risk, introduction of output floors and input floors (credit risk). **These measures will mechanically reduce the ability of risk models to reflect the specific features associated with long-term management.**

Table 2 *The new rules imposed by the final Basel III accord of 07/12/2017*

Risks	Current regulations	New regulations
Credit	Standard approach	New standard approach
	Internal approaches (Foundation - IRB-F and Advanced - IRB-A)	Revision of internal approaches (IRF-F and IRB-A) with new input floor perimeters
Derivatives (CVA)	Standard approach	New standard approach
	Internal model approach	Basic approach
Market	Standard approach	New standard approach
	Internal models (VaR)	Internal models (ES)
Operational	Basic and standard approach	New standard approach
	Model approach (AMA)	
Floor	Basel I floor	Output floor

Source: ACPR, 2018

For example, the output floor consists of defining a lower limit for the results of internal models based on calculations produced by standard approaches (risk-weighted assets calculated by banks based on their internal models may not, in total, fall below 72.5% of the weighted assets calculated using standard approaches). Accordingly, banks that have developed models very different from the standard approaches and whose results prove to be too far off the standard calculation will be penalised. In practice, this approach limits the ability of internal models to reflect the risks specific to the long-term investor.

Similarly, the impossibility of using internal models for certain types of risk (elements of credit risk, operational risk) may constitute a significant obstacle to making allowance for the business model of the long-term investor.

Lastly, **in terms of input floor, the revision of Basel III risks having a negative impact on the project financing category, and therefore infrastructure.**

The internal model to estimate LGD (loss given default) will be authorised under the draft regulation for 'specialised loans', which includes project financing, but imposes a 25% floor which will undoubtedly gave an impact on infrastructure projects. According to a study by S&P (2015), half of loans subject to default show an LGD of between 0% and 9%, with an LGD average of 23.6%[18]. The regulator's choice of 25% is in line with the average but will penalise the best part of half the market

[18] Study conducted into 429 projects from the default procedure with a total of 1,659 loans covering the period 1987-2016, the data being reduced by the loan rate that includes the margin rate.

with an LGD observed to be below 10%. At this level, the financing of an infrastructure project rated BBB- to BB+ over 5 years will be subject to the same terms as a non-guaranteed corporate loan of BBB- over 2.5 years (Paris Europlace, 2018; FBF, 2018).

Furthermore, the standard model is also being revised in the proposal with the application of weighting of between 100% and 130% for **project financing** (Paris Europlace, 2018). The revised standard approach therefore consists in practice of considering the risk exposure of project financing as being higher than equivalent non-guaranteed loans and does not take the specific features of infrastructure into account: a history of low losses (nearly half those of corporate exposures), a legal framework that enables lenders to regularly monitor performance and anticipate difficulties, an operational structure that guarantees creditors access to the cash flows generated by the financial asset in the event of default and cash flow resilience that enables the possibility of simple restructuring with deferred maturity offering very good levels of debt recovery.

Good transactions with a moderate risk profile will be especially penalised. The level of equity requirements is a major factor taken into account by banks to define their risk policy and resource allocation. Any significant increase in these requirements will ultimately lead to a higher cost of credit for the client and/or reduced levels of financing granted by the banks.

Moreover, should the banks become less involved in infrastructure project financing, insurance companies will also suffer, giving rise to a lack of infrastructure investment as significant as the deficit that already exists in Europe. In practice, neither insurance companies nor asset managers have either the capacity or the appetite to structure new transactions and to carry the debt during the construction phase. With public funds being unable to cover infrastructure financing requirements at the global level, negative economic impact would seem inevitable.

Lastly, Basel III provides for **revised standard model weightings which runs the risk of severely penalising long-term equities investment**: the weighting of equities exposures in the banking book will be able to reach up to 400% (corresponding to an equity requirement of 42%).

Conclusion

As a result of the Green Paper published by the Commission five years ago, the importance of long-term investment was highlighted at the right time both for growth and financial stability and a set of initiatives was adopted to meet the necessity of stimulating investment in Europe.

The most significant of these initiatives were incorporated within the Capital Markets Union (CMU) project; they concern transforming modes of corporate financing, mobilising financial markets and exploiting and allocating inflows of long-term savings. As clearly evidenced by the consultations conducted by the Commission, such moves have been warmly received in principle, yet no-one believed that such relatively structural measures could produce significant results in the very short term. Decades would be required to shift the intermediated financing models that have traditionally reigned supreme in Europe in the direction of a market finance model. Yet in terms of international competition, stimulating long-term investment represents a much more immediate issue.

Other measures have also been adopted to modify at the margins the succession of grand post-crisis regulations, the negative effects of which on investment development had begun to be

properly understood. The detailed analysis provided above shows that such adjustments only very partially mitigate the pitfalls of a regulatory system too heavily focused on the very short term, and which ignores the characteristics of their LTI 'business model'. They are just patches which limit the damage to some extent, but do not constitute an effective response to the major political imperative of stimulating private investment in the wake of the Juncker plan.

One of the merits of the first generation of European regulation of the financial sector (banking, insurance, etc.) was to leave those responsible for these activities free to choose in the public interest which asset allocations were best suited to client requirements and to the particular circumstances.

The principle of asset managers' freedom and responsibility is of even greater critical importance today given the diversification of investment instruments, the heightened financial instability and the enhancement of saver protection. To confront its current economic and financial challenges, Europe has no other choice than to address the issue of long-term investment in a global manner in order to establish an appropriate reference framework.

Part 3: A holistic approach to long-term investment

Introduction

Since our first report in November 2011, long-term investment has unquestionably become a banner under which numerous measures have been taken by the European authorities, whether to stimulate balanced and inclusive growth over the long term or to tackle certain of the great environmental, social and technological challenges confronting Europe.

We may well give ourselves a pat on the back for the recognition now accorded to long-term investment, which we have been striving to achieve for many years now. However, as we have demonstrated above, the measures presented as being favourable to long-term investment have ultimately turned out to be inadequate, ineffective and sometimes even counter-productive.

How can it be explained that long-term investment – which has never been as widely acknowledged and the subject of such apparent concern – nevertheless remains in the doldrums in Europe? The hypothesis we are putting forward is that in the absence of a specific, coherent and comprehensive approach to long-term investment, the measures taken have only been patchy and limited, and sometimes even inappropriate.

This is why, to avoid the same pitfalls when formulating our proposals, we wish to return to the definition of long-term investment and take the time to refine it, in order to propose a holistic approach more able to reflect its multiple facets.

To better grasp a concept which is both simple to understand yet complex to explain, we propose to begin by saying what long-term investment is not – or more specifically, what it cannot be reduced to – in order to sketch out an initial "reversed" definition (A). This first step will enable us to submit a simple definition of what constitutes long-term investment 'in essence' (B). Lastly, and as our aim is above all operational, we will deduce from this global definition a few main characteristics (C) which will offer us a solid base for a set of operational proposals which we will detail in the final part of our report.

A. LTI – a 'reversed' definition

1. It is neither an asset class (even if certain assets are more "long-term friendly" than others) ...

It is commonplace to define long-term investment as an investment in certain asset classes. The G30 Working Group (2013), for example, defines LTI as investment in tangible assets (infrastructure, bridges, factories, industry, etc.) and intangible assets (R&D, education etc.) which contribute to growth and competitiveness. For its part, the World Economic Forum defines long-term investment as all types of asset classes held by an investor, the lifespan of which exceeds a production cycle or ten years.

Long-term investment is therefore that which is invested in something that persists over the long term (a bridge, for example) **and which therefore sustains production and growth over the long**

term. Against this perspective, and by way of extension, the concept of a long-term investment is more associated with certain types of assets than others.

As we have already highlighted in our publications (de La Martinière, 2011), this definition is nonetheless unsatisfactory. Admittedly, certain asset classes lend themselves better than others to long-term investment. Yet a single asset class (such as equities) or a single type of channel (such as indexes) may just as easily be a channel for both long-term and short-term investment. There are no reasons to consider that just because an asset is negotiable, or even listed on a liquid market, it cannot be used to support a long-term investment strategy.

2. ... nor a type of liability (even if stable liabilities are a prerequisite for LTI)

Other definitions require an appraisal of the 'long-term' element of liabilities (notably Aglietta, 2009; Aglietta and Rigot, 2011; G30/OCDE, 2013). Liabilities are then classified as long-term if they result from an explicit contract incorporating a distant maturity.

The existence of long-term liabilities does not within itself equate to long-term investment. Yet the existence of stable liabilities is a prerequisite for LTI.

- In general terms, all regular and renewed liabilities of scarcely volatile or predictable amounts may be classified as stable.
- In the case of banks, therefore, although sight deposits entail seasonal volatility and momentary fluctuations, total amounts are globally stable over time and can be used to finance long-term applications (as with the extreme example of *livret A* accounts in France, which finance loans with maturities of up to 50 years).
- Similarly, for non-life and liability insurers, policies cannot be surrendered and, furthermore, are in the overwhelming majority of cases renewed on expiry by way of tacit renewal.

Accordingly, LTI is not limited to own account investments; it also applies to investments on behalf of third parties provided that the commitment entered into vis-à-vis the third party is of a sufficiently stable nature. By way of example, non-life insurers have significant-equity portfolios enabled through regular policy renewal, whereas life insurers invest in equities due to the stability of their liabilities resulting from the foreseeable nature of policy settlements.

3. ... nor a single type of operator – rather a continuum

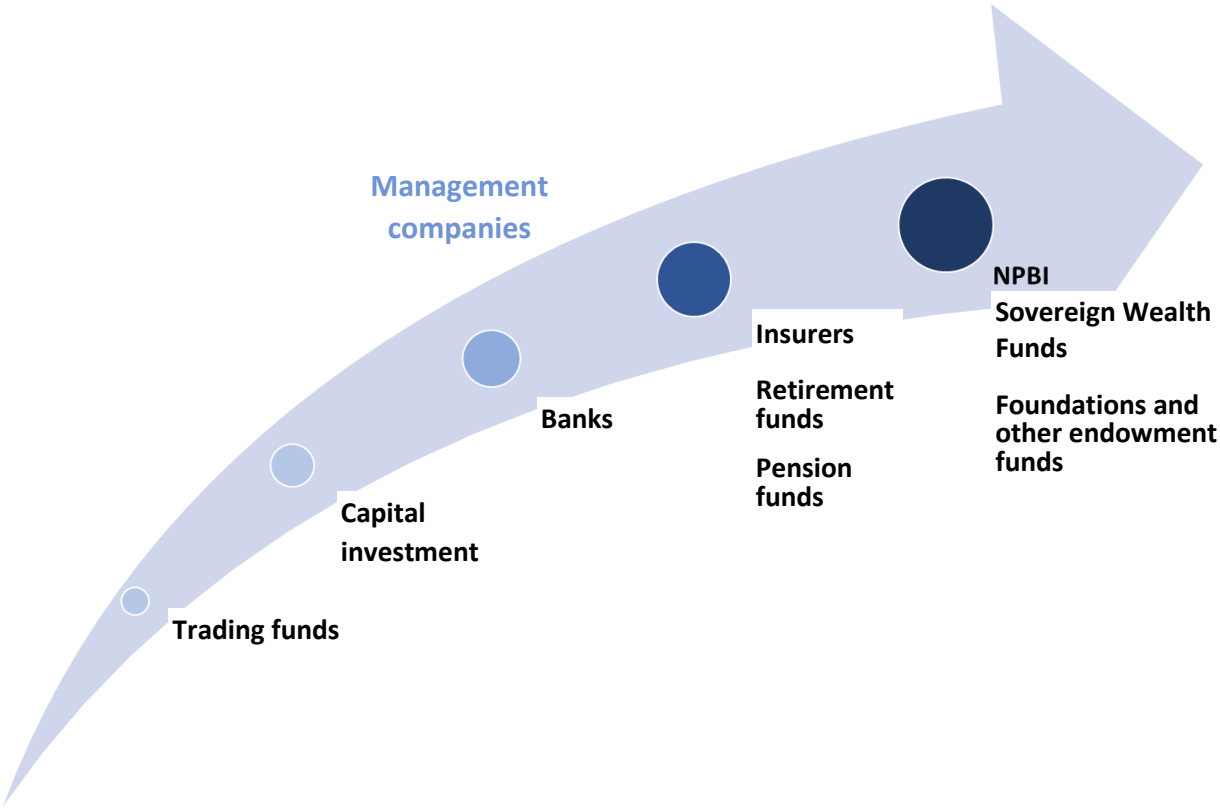
LTI is sometimes defined as the activity performed by a category of well-defined operators, namely long-term investors. In which case, certain operators (e.g. trading funds) can never be categorised as long-term investors.

Yet LTI is not the sole prerogative of a single category of operators. In practice, it concerns operators able to invest over the long term in variable proportions and in diverse forms, thereby constituting a continuum ranging from 'pure' short-termist operators (trading funds) to long-termist operators by their very nature (National Promotional Banks and Institutions, or NPBIs)[19], with all the

[19] Conversely, long-term investors may conduct short-term operations on elements of the portfolio for transitory periods (e.g. cash awaiting investment).

categories of financial operators in between whose activities may be at least partially structured over the long term.

Graph 15 *Continuum of operators liable to invest over the long term*



4. ... nor an investment horizon in the strictest sense

Another path frequently explored is that of the investment horizon: forgive the tautology, but a long-term investment can be defined as an investment incorporating a long-term horizon.

- Long-term management is therefore defined as a management style by which the investor seeks profitability over a long-term horizon (Marathon Club, 2007; G30/OECD, 2013; Papaioannou et al., 2013).

- In order to be classified as long-term management, the asset retention period varies by definition: the World Economic Forum (2012) proposes an "unlimited duration", the Marathon Club (2007) dictates a "long-term economic cycle" and the IMF (Papaioannou et al, 2013) "multiple years".

For some, it is but one small step further towards considering long-term investment as a 'buy and hold' investment: the long-term investor is one who retains their assets in the portfolio for 'x' years (with much debate if 'x' is to be specified), regardless of events in the market; or someone who invests in bonds with maturity of 'x' and awaits redemption on maturity.

This approach, based on the assumption of completely passive behaviour by the long-term investor, is too reductive and excludes broad categories of operators who conduct active management over long-term horizons.

B. LTI – a bit of all these elements

Long-term investment cannot obviously be reduced to one of the above-mentioned definitions but none of the preceding elements is completely foreign to long-term investment. In other words, long-term investment is neither an asset class, nor a type of liability, nor a type of operator, nor a management style, but a bit of all of these elements…

The essence of LTI resides in the implementation of an assets/liabilities management model that capitalises on the stable characteristics of liabilities. The existence of stable liabilities enables an investment strategy to be deployed which, regardless of the vehicle, is designed to produce sufficient long-term return in order to remunerate resources being locked up over an extended period and allows for long-term management (protected from early distress sale) and flexible management (to counter economic vagaries). In summary, the definition proposed by the OECD describes LTI as a productive, patient and responsible investment[20]. In more financial terms, it is an investment that harnesses risk premiums and illiquidity where they are found and optimises the effects of diversification between asset classes over time.

LTI falls under an approach **adopted by the governance bodies** of the entity involved and which is such as to **inspire confidence**.

We therefore believe it to be possible to propose a global definition of long-term investment:

"Long-term investment is the financial investment strategy deployed by any operator holding stable resources which at the same time allows for and requires asset allocation able to generate an economic return over time."

C. A bundle of characteristics

Long-term investment strategies are accompanied by certain characteristic elements of their operational implementation which are related to the three key functions of long-term financing (the **long-term tryptic**) which are crucial for the robustness and confidence that the long-term investor inspires in other economic operators:

1. Long-term asset & liabilities management;
2. Assessment of long-term risks and return;
3. Measurement of long-term value.

[20] Definition of "responsible" by the OECD: direct and continuous engagement by the shareholder and consideration of the long-term risks related to the environment incorporated within the investment strategy and risk management (OECD, 2011).

1. Pillar 1: Long-term asset & liabilities management

(1) Long-term strategy

The strategy expresses the performance objectives and the risk appetite criteria of the institution, defined over a long-term horizon. It must contain an objective to seek optimum financial performance over the long term (as opposed to a performance objective over a short-term horizon). Promoting such a dynamic long-term allocation strategy requires the development of an asset allocation system capable of weathering the fluctuations of the economic cycle.

The long-term therefore means a horizon longer than a single economic cycle enabling long-term investment to be counter-cyclical.

Such a long-term strategy must be fully supported by the investor and/or be formally adopted by the most senior governance bodies of the institution as it requires definition of the institution's level of risk appetite.

(2) Ability to manage assets consistently with stable liabilities

The investor must ensure that their assets are appropriately managed in accordance with the horizon of their liabilities. The stability of liabilities must therefore be analysed as they may be legal, contractual, fiscal, statistical, behavioural or institutional in nature. The ability to manage over the long term can be demonstrated by not having to sell or purchase in contradiction with the performance objectives and the risk appetite criteria expressed via the strategy.

Implementation of the long-term strategy also depends on clear and public choices emanating from investors' governance bodies. Governance must be established that is consistent with the stated long-term objectives, as long-term investment only exists to the extent that the strategic directives validated by the governance body are focused on long-term results, accompanied by monitoring to ensure that a straight course is maintained. This may take the form of a specific investment charter supported by a framework of accountability.

LTI therefore means investors who are able to demonstrate the stability of their liabilities, who make explicit their risk appetite, who are able to clearly present their resultant investment strategy, who apply the strategy by implementing appropriate control processes and who organise themselves to report on progress to their stakeholders from both a financial and non-financial perspective.

(3) The resultant investment policy

The management of assets and liabilities (ALM) leads to the definition of target allocations corresponding to the maximum exposure limits beyond which the performance and risk appetite criteria are no longer adhered to, notably in the event of adverse scenarios. These are the benchmarks that subsequently guide asset allocation decisions.

The investment policy translates these target allocations into a selection of assets and vehicles that are consistent with the targets. The choice of vehicles and underlyings is dictated by the obligation of strategic allocation, in the case of LTI, therefore, by the nature of the liabilities leading to a flexible

and consistent investment. The process of securities selection, the market timing of investments/disinvestments within the limits of the target allocations set under the ALM policy, the monitoring of the macro and microeconomic environments and the monitoring of indicators and cash flows are the main elements of a disciplined investment policy.

2. Pillar 2: Assessment of long-term risk and return

For the investment policy to be consistent with the target portfolio emanating from the strategic allocation, it is also crucial that it is based on an assessment of long-term risks and return.

(1) The risks are the classic financial risks, but viewed through a long-term perspective

The risk of assets being poorly matched with liabilities is certainly the risk that most characterises long-term investment. This risk of mismatch may spring from incorrect liability modelling, from unanticipated distortion of liabilities, from poor anticipation of maturities, from inadequate asset allocation, from bad investment decisions or from failure to monitor investments.

- It is a risk associated with the ALM methodology but which occurs within a timescale that may allow for management action (day-to-day management, preventive management, corrective measures).
- Poor matching entails a reinvestment risk where the duration of liabilities exceeds that of the financial instruments selected as investment vehicles. This applies to bond investments which, in this regard, pose a higher risk than equities without any maturity in practice.
- Significant distortion of the liability profile, especially if it leads to maturities being brought forward, may generate the risk of lower levels of asset performance. Hedging for this type of risk in terms of allocated equity will therefore depend on the degree to which maturity dates can be predicted. In the case of ongoing management, a proportion of the long-term investor's activities are focused on a shorter horizon corresponding to commitments for the current and upcoming year. Predictability is necessarily better regarding liabilities, but asset management becomes more sensitive to market risk.

The main types of risk can be presented from a long-term perspective (Table 3).

Table 3 *The main types of risk viewed from a long-term perspective*

Risk…	… viewed from a long-term perspective	Significance level
Risk of balance sheet mismatch	The risk of balance sheet mismatch is the greatest risk for the long-term investor as assets being badly matched to liabilities generates a risk of economic counter-performance and may even entail a structural risk of deferred liquidity.	
Liquidity risk ('forced sales')	By definition, LTI is characterised by a low short-term liquidity risk thanks to stable liabilities that help it avoid having to make distress disposals.	
Credit risk	Credit risk is naturally pooled within the context of global diversified portfolio management and the existence of a long-term retention horizon offers the benefit of any recovery. However, the long-term investor making durable commitments to the counter-parties within the portfolio is especially sensitive to any default risks associated with the latter parties' structural vulnerabilities.	
Overall interest rate risk	A long-term investment may be exposed to major interest rate variations, notably where it includes an obligation to re-use funds released before the management term, justifying the implementation of close monitoring of the balance sheet rate structure by the long-term investor.	
Equity risk	Given their management horizon, long-term portfolios have little exposure to market risk; this only exists to the extent of the proportion of the portfolio that provides the cash flow for the closest period.	
Currency risk	Book currency positions are generally hedged by the long-term investor. Only unrealised gains on securities denominated in foreign currency might not be hedged and therefore require particular attention.	
Operational risk	As long-term management is not based on day-to-day operations, it is much less exposed to the risk of operational failure.	
Reputational risk	The long-term investor must remain vigilant regarding their reputation in the market as they establish long-term relationships with counterparties based on trust.	

Level	Colour
Low	
Medium	
High	

(2) The assessment of risks and return must take the management horizon into account

The long-term investment strategy also requires long-term risk to be measured. This principle can be viewed from two complementary angles:

The horizon within the measurement of risk

When market prices are readily available (e.g. listed assets), two standard methods are used to measure the risks of a financial portfolio. The first method is Value at Risk (VaR), which assesses the maximum potential loss of an investor when exposed to a particular portfolio or asset at a given horizon and confidence level. The second method is Expected Shortfall, which measures the average loss a portfolio or asset class may incur in a defined percentage of worst-case scenarios of the loss distribution tail over a given horizon.

These methods presuppose **adequate definition of the main calculation parameters, taking into account the long-term management horizon**:

- A sufficiently long data history must be produced in order to calculate the loss and profit distribution a long-term investment is likely to generate;
- The choice of calculation method (historic, parametric, Monte Carlo, etc.) is also important, notably in order to assess extreme risks – all the more likely to occur the longer the horizon;
- The selection of the reference horizon for calculating the extreme or average loss must equate as closely as possible to the retention period of the asset or portfolio;
- Lastly, the confidence level has a major effect on the result and the coherency of the calculation, and partly reflects the risk appetite of the governance.

But beyond questions about calculation parameters, it is the very logic of assessing risk based on market prices that warrants discussion in a context of long-term management. Assets subject to long-term investment, such as real estate or infrastructure, are assets that generate regular return over an extended period. For the long-term investor, **the major risk associated with their investment is not market risk but a more economic risk, resulting from variations in expected returns much more than any risk relating to underlying asset prices.** It is therefore perhaps necessary to develop as assessment that takes into account risk factors that affect such returns, such as occupancy levels for real estate, the traffic or construction risk for infrastructure, the management risk for private equity or the legal risk for intangible assets. The model will then be very different from and more complete than the result of simply calculating asset price volatility on a market.

The horizon in the use of risk measures

Long-term financial management cuts across successive economic cycles, whether interest rate or corporate performance cycles. **Risk should therefore not be viewed on a momentary basis or, at least, the consequences of a momentary variation in a measurement of risk should not have an immediate impact on the management style.** This supports the existence of cyclical fluctuation smoothing mechanisms, as achieved by Solvency II, although only on a very partial basis, by introducing the 'dampener', a symmetrical adjustment mechanism that encourages long-term investors to adopt anticyclical behaviour which is, after all, their fundamental vocation.

(3) Assessing risk and return, including the externalities associated with investments

A long-term investment requires particular attention to be paid to the externalities that the investment may produce via the project it is financing.

The externalities may be negative if they adversely affect the anticipated return of the investment. Climate change may therefore reduce the return from highly polluting industries should the regulations in the field become more severe, should resources become depleted, or if new cleaner sources of energy are developed. Conversely, other externalities may be positive and increase the return of the asset over the long term, such as a company's investment in R&D, its employment policies promoting development of human capital, etc. **Given their management horizon, long-term investors must assess the risk and return of their investments while taking into account the positive and negative externalities that will surely have a long-term impact.**

Regarding risk management policy, the importance of giving appropriate consideration to externalities is especially clear; by way of illustration:

- *Taking account of externalities enhances the management of credit risk*, which depends on the long-term creditworthiness of the counter-party, which is in turn related to credit events that may occur over an extended period. This fully justifies analysis of the counter party's strategy over the long term, and therefore the quality of their ESG management.
- *Taking account of externalities enhances the measures taken to counter equity risk,* notably in the form of 'stranded assets' (for example, if climate change or regulations on climate change become more severe, the value of highly polluting industries will reduce).

The definition of a credible measurement of both the positive and negative impacts of portfolio investments is therefore one of the main challenges long-term investors are require to meet.

3. Pillar 3: A measurement of LT value

Lastly, the prerequisite for effective implementation of a long-term investment strategy is the existence of an accounting and results measurement system that reflects the value creation of the said strategy.

As we highlighted earlier, a long-term strategy (i) is a balance sheet management strategy, i.e. joint management of assets and liabilities, (ii) is based on an investment policy that is consistent with the strategy, and (iii) effectively assesses the long-term risks and returns of the various components of the balance sheet.

Consequently, a system for measuring value adapted to long-term investment must adhere to the following principles:

- Asset recognition must be consistent with that of liabilities in order to adequately trace the matching of assets and liabilities –the key to long-term management.
- Assets should be approached on a portfolio basis rather than line by line; it is the entire constituted portfolio that must be set against the recorded liabilities, not any single line of securities taken in isolation.

- A uniform recognition method must apply to all asset classes included within the portfolio regarding the target allocation and the requirement to make adjustments over time.

The best approach for measuring the long-term performance potential will take into account the management horizon of the asset in question.

Lastly, the selected risk measurement system must enable externalities to be taken into account, including the ability to trace their impact in order to provide transparency and allow for appropriate information vis-à-vis management decisions. The development of non-financial reporting is just as important as financial reporting for long-term investments if stable and fruitful returns are to be guaranteed.

Conclusion

Asset class, type of liability, operator category, investment horizon: LTI cannot be approached from any single one of these aspects. This is why we propose a holistic definition of LTI that encompasses the whole spectrum of the term. Based on the basket of characteristics that emanate from the definition, it is now time for us to issue our recommendations for creating a conducive LTI environment in Europe.

Part 4: Recommendations

Based on the definition of LTI that we are proposing, we believe it is possible to promote a favourable regulatory environment by applying a few simple principles:

1) First of all, **LTI must be repositioned at the centre of public policies** – while at the same time ceasing to consider it only in a somewhat accessory manner, as an afterthought, via ad hoc and exceptional mechanisms which only tackle one of its aspects at best, while ignoring all the rest.
2) Such refocusing of public policies on the specific features of LTI must first take the form of **adequate measurement of the associated risks and returns**, in order to break free from the dominant financial approach that always and by default favours the short term, market value, disintermediation and instantaneous liquidity.
3) Under this condition it becomes possible to **draw on long term asset & liabilities management**, which fully recognises the value of stable liabilities and the importance of a long-term management horizon in which the principle of business continuity prevails over immediate liquidity.
4) This new approach must be accompanied by measures that **promote alignment of the interests of the various operators with long-term objectives** – as LTI is ultimately everyone's business: from the saver to the investor via the entire intermediation chain, right up to the entrepreneur.

These principles should inspire the development of an appropriate body of regulations designed to reconstruct Europe's full capacity for long-term investment. Yet it would not be realistic to sweep aside all existing measures.

The merits of this approach are that we are also able, in a pragmatic manner, to set out these general recommendations – which sketch out the contours of an ideal environment – in light of existing regulations, in order to identify measures which, in the short term, could be proposed to bring the status quo closer to the ideal.

The following recommendations are therefore broken down into:

Target measures

Immediate measures (based on existing regulations)

To be avoided (in all circumstances)

A. Principle no. 1: Repositioning LTI at the centre of public policies

Recommendation no. 1: Incorporate a measurement of LTI within European national accounting systems

As we have seen in the first part of this report, long-term investment cannot be measured using national accounting tools – except in a somewhat indirect and imprecise manner (sector-based approach).

Add a measurement of long-term investment to the Eurostat work program, to be integrated within European national accounting systems.

Recommendation no. 2: Ensure that the LTI dimension is taken into account during the development of European financial regulations and assess the same regulations in terms of LTI.

Early consideration of LTI requirements can be achieved by enhanced assessment of the impact of the various regulations and by targeted analysis of the fundamental scope of long-term financing.

Renew the European Parliament Intergroup on long-term investment and reindustrialisation for the 2019-2024 term.

Establish an interservice steering group in order to produce a 'fitness check' on the EU's legislative framework on long-term investment.

Introduce an LTI component within the impact studies that accompany draft European regulations in the accounting and prudential field.

Drawing to a greater degree on the European advantage of powerful intermediation structures, review the CMU within a post-Brexit context in order to combine it with the development of market financing.

Do not approach LTI without a holistic vision.

Do not set intermediated financing and market financing against one another.

B. Principle no. 2: Allow for adequate measurement of long-term risk and return

Recommendation no. 3: enable the accounting system to more accurately reflect the effects of a long-term management strategy

In order to counter the impact of widespread measurement via market value, we must also acknowledge the existence of alternative accounting measurements, notably one which is appropriate for long-term management, in compliance with the principle of fair value that is not simply reduced to market value.

Introduce the concept of long-term projected value for portfolios managed over the long-term by incorporating all forecast cash flows in accordance with analysis supporting the investment decision. Accounts using projected value can then be published alonside notes to the accounts using market value, in the interests of maintaining transparency.

Under IFRS9, authorise recycling of the results of listed and unlisted equities recognised at fair value through OCI, to enable measurement of the results of a long-term investment strategy.

Reclassify the recognition of equity funds in accordance with the management orientation and the investor's management strategy, in order to ensure neutrality between direct investment and intermediated investment.

Do not reduce fair value to market value alone.

Recommendation no. 4: Measure risk in the light of the management horizon

Complementary to the approach that has previously focussed on asset classes (appropriate treatment of infrastructure), it is an approach that takes the investor's management strategy into account when assessing the risks carried on the balance sheet which the investor must also develop.

Preservation of internal models within banking regulation

Internal models enable the assessment of risk to be adapted to the specific features of the institution's business model and, consequently, offer the flexibility required to take into account risks associated with long-term management. The impact of the various supervisory measures for using internal models is therefore a source of future concern.

Prior to the introduction phase of the output floor and subsequently during this phase (2022-2025), schedule impact studies on the changes to banks' internal models and their ability to reflect their investment strategies.

A risk calculation method taking the management horizon into account

For insurance within the context of revision of the Solvency II delegated act, incorporate a new asset class for assets held within a portfolio managed with a long-term perspective (Investments in LT Equities) which would receive similar treatment to strategic holdings.

Eligibility would be enjoyed by portfolios covered by a long-term management strategy pronounced at the highest level of governance, with the objective of performance optimisation supported by a risk control framework that is compatible with the long-term horizon. The new class would have to meet the following criteria:

- Stable liabilities;
- Appropriate governance: long-term performance objective, and ALM and investment policy aligned with this objective;
- Document the capacity of the insurer to maintain stable equities investment in a degraded situation via a liquidity test;
- Incorporate the investment strategy within the ORSA (Own Risk & Solvency Assessment).

Calibrate the risk indicators (such as the amount of potential losses and average expected loss) over a period consistent with the management horizon and take account of all anticipated flows during the investment period.

Concerning the provisioning of long-term loans, review the details of expected loss as proposed by the IASB to take successive future cash flows into account (interest to be received over the period), in order to measure the amount to be provisioned.

Greater consideration given to the long-term management of infrastructure projects

Facilitate the use of favourable prudential treatment for all infrastructure projects managed over the long term by softening the conditions for eligibility to light-touch regimes (in both the banking and insurance fields).

Review the prudential treatment of project financing in order to better reflect long-term risks (refined calibration of the LGD floors for 'specialised loans' for internal models, notably by lowering the floor to 10% for infrastructure projects; modulation of the weighting in the standard approach depending on the project being financed).

Recommendation no. 5: Taking account of long-term risks and mitigation strategies

All financial operators are subject to long-term risks requiring enhanced assessment. But where such operators implement risk mitigation strategies within the context of their long-term management, this should also be given due consideration.

Implementation of stress tests for long-term risks to establish the capital charges of financial institutions in accordance with their exposure to such risks.

Conversely, when calculating equity requirements, to allow consideration to be given to management action in controlling and mitigating the company's risks. Such management action may take multiple forms, whether internal (distribution and pooling mechanisms, timing of purchases and disposals, etc.) or external (diverse security interests and guarantees, reinsurance, etc.).

C. Principle no. 3: Promote long-term asset & liabilities management

Regulatory frameworks should promote the adoption of a long-term ALM strategy, by favouring an approach that stresses business continuity. This constitutes a mirror image of the current approach, which favours immediate liquidation approaches to assess risk and define action plans.

Such frameworks should also be applied by taking into account overall ALM consistency.

Do not consider risk-free management to be based on the perfect matching of long-term assets with long-term liabilities, and short-term assets with short-term liabilities.

Recommendation no. 6: Promote stable behaviour by focussing on progressive adjustments

Whenever possible, mechanisms that favour progressive adjustment processes should be promoted in order to limit the risks of short-term overreaction, management discontinuity and snowball effects.

Regarding insurance, widen the scope of eligibility for the matching adjustment and volatility adjustment, notably by taking into account the asset yield rate when establishing the discount rate in cases where the predictable asset and liability flows are perfectly correlated.

Regarding compliance with prudential ratios, wherever possible ensure that it applies to the conclusion of an adjustment period that is sufficient to limit the pro-cyclical behaviour of distress sales (e.g. with alert thresholds triggering implementation of a progressive adjustment strategy, as opposed to critical thresholds triggering immediate management decisions).

Do not define cut-off points that trigger distress sales and management discontinuity contrary to the long-term investment strategy.

Recommendation no. 7: Propose consumer long-term investment vehicles

Long-term management should not be limited to particular instruments but should rather relate to the manner in which vehicles are managed with a long-term perspective. Long-term vehicles are, above all, those with the governance and liability characteristics that enable long-term management to be practiced.

Create a product in the form of a UCITS with an unlisted unit benefiting from reduced liquidity (quarterly or half-yearly subscription and redemption window).

Remove the obstacles to long-term management within products offered to the retail market (insurers' euro funds, UCITS, etc.), especially the ability to hold shares with the objective of achieving performance over a long-term horizon.

Provide a better distinction between short-term and long-term products and limit subscriber exit options in the case of long-term products.

Do not confuse saver security with immediate product liquidity.

Do not apply different accounting treatment to securities held directly and those via collective investment undertakings.

D. Principle no. 4: Promote alignment of the various operators' interests with long-term objectives

Recommendation no. 8: Promote contract structures favourable to the long term

An asset portfolio financing the long-term economy will only be attractive if each of the assets of which it is composed has been carefully selected. A well-designed, well-constructed and well-financed project poses very few risks for long-term investors.

Select the investment in accordance with strict criteria of economic and financial profitability, with adequate debt coverage ratios.

Draft the corresponding contract (e.g. operating contract) such that the risks are borne by the party best able to assume them (private or public sector) and by providing sufficiently long-term visibility for contract parties.

Allow for adjustment clauses in the contract in response to any changes in economic conditions.

Develop more legal mechanisms such as the profit-sharing provision to smooth out financial profits over time and extend access to all long-term investors.

Do not exclude any asset class from the investment universe provided the asset is financing a project that contributes to the long-term economy. The fact of a financial instrument being negotiable should not present an obstacle to it being able to be used as a long-term investment vehicle and its treatment should remain consistent with that of the strategy by which it is covered.

During project selection, distinguish between 'funding' (who is paying for the project, the tax payer or the user/client) and 'financing' (who is providing the debt and capital to be repaid by those providing the funding), and give due consideration to the direct and indirect budgetary impact (via revenue growth[21]) in order to measure the precise impact on the public finances.

Recommendation no. 9: Promote transparent and long-term securitisation

Widen asset eligibility for the numerator of liquidity ratios and in the calculation of leverage ratios, to include simple, transparent and standardised (STS) securitised products backed by loans financing long-term projects (SMEs, innovative project loans and private equity).

Exclude securitisation entities from the definition of 'financial counterparty' in order to avoid submitting them to overly burdensome regulatory requirements, notably in terms of mandatory clearing which would be counter-productive to the interests of their long-term financing of the economy.

Recommendation no. 10: Promote the principles of good governance in support of LTI

Move towards a remuneration structure for senior executives and asset managers that:

- Incorporates ESG criteria within variable remuneration performance criteria;
- Includes a long-term component (e.g. long-term deferred remuneration).

Develop relations between shareholders and the board of directors or supervisory board focussing on long-term strategy and performance.

Ensure that shareholders and investors receive pertinent and balanced information on the strategy, the development model, the inclusion of non-financial issues that are significant to the company and its long-term perspectives.

Recommendation no. 11: Enhance the readability of financial information relating to LTI

The information communicated about the long-term investment strategy must clearly deonstrate its coherency, results and risks.

Establish reporting at portfolio level rather than instrument by instrument in order to reflect the advantages of diversification and global management.

At the European level, introduce reporting for portfolio management companies incorporating the various elements that enable insurance and reinsurance companies to

[21] The IMF has shown that good quality projects producing a 1% growth in the GDP of a country generate additional tax receipts of between 0.8% and 1.5% depending on selection quality.

determine the eligibility or otherwise of infrastructure assets to the reduced SCR rate (qualifying infrastructure).

Promote an integrated approach vis-à-vis all stakeholders that includes both financial and non-financial performance, in order to provide a clear vision of long-term strategy and global performance.

Recommendation no. 12: Reinforce financial literacy and information regarding LTI

Levels of financial literacy in the different member states may vary, yet are generally low. The reinforcement of financial literacy vis-à-vis both the general public and decision makers is crucial if we are to improve the allocation of savings, and should occupy a central position within LTI. Such reinforcement should take place via training programs and tools and by improving financial communication concerning products.

When savers wish to lock up their savings over the long term, it is important that they are able to measure the illiquidity premium that compensates inaccessibility, and not only the associated risks. And conversely, liquid vehicles will impose a certain opportunity cost on the saver.

In long-term investment product documentation, render mandatory the provision of information about the benefits, risks and associated costs (and not only information about the risks associated with the investment).

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Glossary – List of acronyms

ACPR : Autorité de contrôle prudentiel et de résolution (The French Prudential Supervision Authority)

(L')**AGEFI** : Nouvelle agence économique et financière

AF2i : Association Française des Investisseurs Institutionnels (The French Institutional Investors' association)

BIS : Bank for International Settlements

CMU : Capital Markets Union

CEPII : Centre d'études prospectives et d'informations internationales

CEPS : Center for European Policy Studies

CET 1 : Common Equity Tier 1

CRD : Capital Requirements Directive

CRR : Capital Requirements Regulation

ECB : European Central Bank

EDHEC : École des hautes études commerciales

EEA : European economic area

EFRAG : European Financial Reporting Advisory Group

EFSI : European Fund for Strategic Investments

EIB : European Investment Bank

EIOPA : European Insurance and Occupational Pensions Authority

EMIR : European market and infrastructure regulation

EU : European union

FSB : Financial Stability Board

GDP : Gross domestic product

HTC : held to collect

HTCS : held to collect and sell

IAS : International Accounting Standards

ICF : Inner City Fund (consulting agency)

IFRS : International Financial Reporting Standards

IMF : International monetary fund

KPMG : Klynveld-Peat-Marwick-Goerdeler (international audit network)

LCR : Liquidity Coverage Ratio

LGD : Loss Given Default

LTI : Long term investment

MIF : Market of financial instruments

NSFR : Net Stable Funding Ratio

OCI : Other Comprehensive Income

OECD : Organisation for Economic Co-operation and Development

QIS : Quantitative impact study

SCR : Solvency Capital Requirement

SPPI : Solely Payment of Principal and Interests

VaR : Value at risk

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