

GLOBAL WARNING

Conseil en stratégie finance, énergie et climat

Paris, 27 March, 2015

Contribution to the

REVISION TO THE STANDARDISED APPROACH FOR CREDIT RISK

Basel Committee on Banking Supervision

Consultative document issued for comments – March 2015

About GLOBAL WARNING (GW) :

GW is a Paris based leading expertise consultancy company, with a focus on energy and finance macroeconomic. Its key references are :

2012 : [RISKERGY](#) R&D 3,4 M€ project (2013 – 2016) designed by GW. Its goal is to develop a new financial rating methodology (based on macroeconomic modeling taking into account energy as a key driver, as well as money and credit) in order to assess sovereign debt risks.

2013 : Contribution to the European Commission Green Book on Long term finance in Europe : [Contribution au livre vert sur le financement à long terme de l'économie européenne - 2013](#)

2013 : Contribution to the French government consultative document on the financing of the ecological transition (not published). REPONSE AU LIVRE BLANC SUR LE FINANCEMENT DE LA TRANSITION ECOLOGIQUE- *Mobiliser les financements privés vers la transition écologique* - Paris 31 janvier 2014

2014 : France - Finance & Bank conference on energy transition. GW designed a broad consensus finance industry contribution : [Contribution à la conférence bancaire et financière sur la transition énergétique](#) – ORSE 19 juin 2014 : “Comment le système financier peut accompagner l'économie réelle au service de la transition énergétique »

2014 - Juncker Plan Infrastructure financing proposal : GW has launched and led a macroeconomic study (2013 -2014) for large-scale public building energy retrofit projects (420 G€) with very long-term financing involving energy performance monitoring. The [SFTE](#) study was published in november 2014, with a large impact on the Juncker Plan announcements.

Michel LEPETIT

Global Warning CEO

Context and global remarks on the Basel Committee consultative document

The macroeconomic environment and its structural trends

IMF head Mme Ch. Lagarde stated in 2014 :

"There is too little economic risk taking, and too much financial risk taking".

There is a growing consensus among macro economists that, since 2008:

- Worldwide investment is sluggish
- Global growth is anemic: global GDP growth is disappointing year after year

These trends seem to be structural : the « secular stagnation » debate is recurrent now. The slowdown is not dated from 2008. It started in the 70's, according to M. Robert Gordon famous academic research. And GW agrees with the statement, if not with its diagnostic.

The finance industry has collapsed in 2008 and its healing –under the Basel Committee supervision- is very progressive.

2009 : This was time was for vigorous medicine. Legitimately, the financial regulator pushed forward this radical cure as its primary goal.

But we won't have « good old days » again it seems. Regulation, financial regulation, cannot, must not just take into account the past; but can and must prepare the future and the reality of global macroeconomic constraints and structural trends we are facing now.

These constraints on the investments processes are worldwide. Public as well as private investments. The collapse of 2008 seems hard to recover from.

- public : the G20 and the IMF and other institutions have been pushing the idea of public infrastructure « new deal » (the Juncker Plan in Europe being one of its instances)
- private : the BRI itself is warning public authorities that ultra low rates are not enough (see BRI march 2015 [\(Why\) Is investment weak?](#)). CAPEX seem to be weaker than before 2008, and the star CAPEX industry before the oil slump of mid-2014 was the Gas&Oil and its 700 Bn\$ CAPEX yearly investment in E&P. CAPEX which is just being cut drastically in 2015 ...

In both case, but it is even truer for private investments, the interest rates lever will not make it. The cure to slowing CAPEX and infrastructure investments cannot just be ultra low rates.

Investors need reduction in economic uncertainty.

The physical world

When the Basel Committee explains that "... capital requirement should be commensurate with underlying risks", GW hopes that it also means the measurement and appraisal of real physical risks.

Mainstream economists seem too far from physical realities, and probably fascinated by mathematics apparatus and models, too far from the real world. For the first time ever, Finance is even capable of handling negative interest rates !...

Mainstream economist do not see 3 key issues regarding macroeconomy and the real world economy :

- (1) energy is key : energy is not just a "commodity", it is not "just" a factor of production. It has always been and still is the blood of world economy.

Spokesperson of the Secular stagnation school, Lawrence Summers, the former US Treasury secretary, has pointed out in January 2014 that when connections are lost in power cuts, economic output falls rapidly – and that the effects of financial crises are analogous.

"There would be a set of economists who would sit around explaining that electricity was only 4 per cent of the economy and so if you lost 80 per cent of electricity you couldn't possibly have lost more than 3 per cent of the economy," he joked in a speech at an International Monetary Fund conference last November. But "we would understand . . . that when there wasn't any electricity, there wasn't really going to be much economy".

GW does think this statement is more profound than a simple joke by analogy. This comment is much cleverer than his author ever thought, comparing electricity and financial flows.

Mainstream economists focus on two factors of wealth (GDP) production: work and capital, with substitution between them. They discuss about sharing production benefits among them. This was an illusion because, for more than 200 years, energy – 80% of primary energy being from fossil origin- had been abundant, and had been used without any constraint.

- (2) Energy most powerful kind of carriers is oil. Crude oil is under a growing long-term scarcity constraint. There are concerns about cheap crude oil worldwide now. And the 2014 halving of oil price cannot hide this growing constraint on cheap oil. Among the variety of energy carriers, in 2015, oil is now less substitutable than any other : 95% of transportation is oil-based. Nearly 50% of oil consumption is for transportation.

As some economists, GW promotes the idea that secular stagnation, and the slowdown starting in the 70's with the first twin oil shocks was caused by less abundant crude oil availability. Crude oil production worldwide –except for North America +3M Barrel/day - has been almost flat between 2005 and 2015 from 76M Barrel/day to 79M.

And the volatility of [shale oil production](#), largely based on very cheap credit and a unique and efficient US reaction to price signal, will perhaps be not sufficient to change King Hubbert 1971 peak oil forecast.

- (3) Energy – 80% from fossil origin- is under a consumption constraint, if we want our planet to survive CO2 emissions and man-made climate change, probably the XXI th century top challenge. The concentration of CO2 in the atmosphere has reached in 2015 a level last seen 3 million years ago.

[UN President Jim Yong Kim said in 2014 at a world Bank Conference :](#)

« Financial regulators need to lead, as well. Sooner rather than later, they must address the systemic risk associated with carbon-intensive activities in their economies, made clear, of course, by price signals. Start now by enforcing disclosure of climate risk and requiring companies and financial institutions to assess their exposure to climate-related impacts. The so-called "long-term investors" must recognize their fiduciary responsibility to future pension holders who will be affected by decisions made today. Corporate leaders should not wait to act until market signals are right and national investment policies are in place. »

General consideration regarding the standard approach

GW agrees with the Committee that there are many “weaknesses” in the current approach regarding standard methodology for Risk Weighted Assets.

Three general topics are worth consideration:

- the market failures
- the traceability of credit
- the sovereign risk

The market signal failures

One weakness of systemic risk analysis concepts is the central assumption that markets are efficient, that they provides the right price signals, and that regulation should be only looking for a global stability framework.

Following preceding comment on macro economy and energy, GW thinks there are obvious market failures clearly identified now, for which corrective actions – from this systemic risk point of view- should be taken into account.

These market failures affect the price of energy. Given how energy impacts the whole economy, these failures prevent and inhibit quality long term investment dependent on energy prices, i.e. huge segments of our global economy. These key market failures are :

- the price of fossil fuels. There is a growing worldwide consensus involving a large number of stakeholders that putting a price signal on carbon is vital and urgent.

- the price of oil and its volatility : in the last ten years, we have seen huge swings, of this key commodity price. Still, the growing cheap oil scarcity phenomena is nowhere in long term future market prices

The traceability of credit

The transition toward a low carbon economy is THE challenge faced by the international community, as well as by each national economy in the coming years.

We can also anticipate a growing amount of investments in climate change adaptation.

Even if energy price signals are faulty, more and more projects, by individuals, public or corporate, are and will be shaped around this global “shift project.”

Energy transition is one of the key domains often mentioned by studies on long –term finance : energy infrastructures, besides R&D, telecom, or water. Very often, it is the first domain, with its large scope : energy production, energy grids, transportation, energy efficiency ...

GW emphasizes the importance of traceability of investments, in order to:

- facilitate long term financing. Even better, enable very long term financing, when very long term rates are historically low everywhere. At least for the last millennium in western Europe ...
- enable focused public support (fiscal ; credit guarantees as in the Juncker Plan, macroprudential rules through central banks ...) on these energy projects
- improve efficient public policy monitoring by governments (analytical cost/benefit evaluation)

The concept of “Project finance” should be generalized, be it leasing of equipment for SME, house mortgage residential financing, property leasing, infrastructure project finance ... The “Green bond” or “Climate bond” trend is one instance of such traceability issue.

This emphasis on an “object” has to do with the existence of a collateral from a pure risk point of view, but goes beyond that. Some financial institutions oppose this traceability concept, arguing that this could prevent mutualization of risks. Specialized credit is not a self-sufficient concept; it must be understood as a tool for systemic risk management, because of these projects energy impacts.

Because a “project” is most of the time linked with an “asset” (such as : a building; a car; a railway section ...), the carbon energy performance of the “asset” could and should be taken into account by Risk regulation.

Sovereign risk

The Basel Committee proposal does not address (yet) the sovereign debt risk.

What treatment should be provided for sovereign debts in the announced future proposal ?

This risk is a very specific one. The recent work on this special risk by the ESRB (European Systemic Risk Board - [report on the regulatory treatment of sovereign exposures – march 2015](#)) provides insights on the difficulties in front of the Basel Committee.

GW agrees that relying on internal risk models, that can be poorly calibrated, or on external ratings, which caused heavy failures during the 2008 collapse, is an issue.

- sovereign risk is for statistical reasons very different from other risks which measurement is based on large numbers statistically meaningful (as long as the future looks like the past – see previous point). PD and LGD are here pure estimates. Besides, the “feedback loop” of sovereign credit risk impacted via money creation by the sovereign, has no equivalent in corporate risk analysis.
- External sovereign risk analysis methodology – through credit rating agency- is very standard, and really poor in its content. Time horizon forecast is usually short (3 years maximum), and the size of the specialized teams in charge of this risk in CRA is limited (For most of them there is no macro economic modeling capacity).
- Benchmarking CRA ratings regarding corporate risk (which are well founded and based on well-founded econometrics credit scoring, industry benchmarking, and balance-sheet analysis) with sovereign risk rating is meaningless.

Proposed revisions to the standardized approach for credit risk

Banks

Bank risk assessment is obviously linked with sovereign risk. Given that among the \$100 trillions of total debt securities outstanding, roughly 40% can be categorized as sovereign debts, and 40% are issued by financial corporations, the Basel Committee proposal to separate Bank risk measurement from sovereign risk is surprising, when in fact it appears that the link between the financial corporations and their state of incorporation has never been so tight. And so obvious.

Not only the role of banks in money creation is nowadays a common knowledge ([Money creation in the modern economy – Bank of England – QB – 2014 Q1](#)), but the 2008 crisis has shown the “too big to fail” vital link in action in many countries.

The growing “fragmentation” of financial markets due to the “secular stagnation” slowdown is going to further strengthen this bond between banks and their state of incorporation, which should not have been ever forgotten in the first place.

Q1 & Q2 & Q3 & Q4 : The risk process is largely inappropriate, if it does not take into account the bond with sovereign risk

Corporates and SME

The sovereign “ceiling”

One can criticize the “ceiling” mechanism between corporate and the sovereign risks of the country where the company is incorporated. This link could be seen as weaker regarding SME. But given the geopolitical and political growing turmoils worldwide, and the flagrant “currency” war, it would be naïve to think there is no link between corporate and country risk.

As mentioned above, project finance –under every kind, like leasing - should be supported and favored, to enable and unleash sound long term energy transition investments.

Q5 & Q6 & Q7 : The risk process should enable traceability of investment, in order to enable and favor energy transition projects. This criteria should be an incentive for traceable finance.

Specialized lending

Q8: Specialized lending should be viewed as well as an opportunity for more targeted investment in favor of the energy transition.

Retail portofolio

There is a challenge in the finance and bank industry regarding consumer credits. They are mostly untargeted ; and when they are, not monitored as such special purpose credit. It is for instance difficult for many financial institutions to identify a refurbishment work credit as an energy efficiency project. Most of the time, it will be referenced as simple “consumer credit” in the IT systems. Consumer credit are often packaged together, with no distinction between cars, appliance, or pure unaffected revolving credit.

Q9: The risk process should enable traceability of credit, in order to enable and favor energy transition projects (automobile; energy refurbishment work ...). This criteria should be an incentive for traceable credit.

Residential real estate

Housing finance is a large part of banks balance sheet. As collaterals, these assets play a leading role in finance and systemic risk. The Basel Committee suggestion to take into account risk criteria which have been used for a long time in France (LTV and DSC), with positive impacts on risk management, is a step in the right direction.

DSC simulations could enable to take into account rising energy prices. As well as future impacts of energy efficiency projects (building retrofit ...).

For reasons already mentioned, GW suggests to add energy efficiency criteria in the measure of risk for residential property finance. Of course GW is aware that these criteria takes only partly energy related risks into accounts (for instance ; public transport availability is also a risk criteria ; as well as structural unemployment in the area ect ..). But the introduction of energy efficiency in housing finance regulation will be a very strong risk signal for the banking industry ; and it will support public policies which aim to highlight energy efficiency scores of buildings, in a clean, accurate and credible way.

This risk concern is enhanced by the lengthening of credit duration for residential mortgages. Secular stagnation implies very long term, historically ultra low, interest rates. Lengthening maturity credit is an easy way to improve DSC. In the long term, this debt service could be challenged by growing energy prices.

Q10 & Q11 & Q12 : Energy efficiency criteria on buildings should be a parameter for property lending (positive incentive) : retail residential as well as corporate

Commercial Real Estate

Q14 & Q15 : As other specialized lending, it should not be penalized, but need more adequate and specific risk analysis regarding long term trends on commercial property, commerce and its links with energy challenges

Currency mismatch

The currency war is probably going to last, with the secular stagnation

Q16 : currency should be seen through sovereign and country risk (see above)

Multilateral development banks

The 0% rating for “eligible MDB” is accurate. MDB concern about energy constraints and the energy transition is growing, and for instance at the heart of World Bank or AFD strategy.

Q20 : For non eligible MDB, the external CRA ratings is inappropriate : mainstream CRAs have no understanding of the long term challenges of the energy transition for the MDB.

Other asset :

Q21 : each time a specific segment is available, it should be treated as a separate class.

Conclusions

Regulation aim is not just « preventing systemic risks », it cannot be “only” preventing once again the 2008 collapse.

We have had recently some examples of targeted intervention by central banks, as the FLS by the BoE, or the TLTRO by the ECB. Macroprudential targeting could be extended. Better, energy transition targeting could, and should be put in the basic rules of BASEL IV regulation. As a positive incentives, to begin with.

In the draft (page 5), the Basel Committee lists 7 high level principles in order to guide the evaluation of policy proposals.

GW suggest to add another one, which should be N° 1 principle.

“The policy recommendation should provide the correct incentives for banks considering worldwide shared-policy objectives, regarding energy and carbon challenges.”

GW suggests a new governance for the Basel Committee, in line with UN President request for a leading role by financial regulators :

- the Basel Committee should have several experts in the fields of the carbon & energy transition (its physics ; its impacts ; its measurements tools ; its financing tools ; its public policy means) among its board members
- A sub-Committee should coordinate regulation with other financial regulators (Solvency II ; IFRS) so that key subjects like long-term finance –at the heart of the energy transition- are properly addressed globally.
- the Basel Committee should support the creation of an independent world energy agency (Intergovernmental Panel on Carbon and Energy Transition), shared with other financial regulators.

- every regulation review by the Committee should have an impact assessment on the energy and carbon transition issues

The 2015 price signals provided by the markets regarding energy and carbon price in the future are catastrophic :

oil is “cheap” at 50\$/Barrel ; and CO2 ETS price is close to nothing.

Are we going to wait until ? until what ?

“All mankind is divided into three classes : those that are immovable, those that are movable, and those that move” – Benjamin Franklin

Let’s hope the Basel Committee will move in 2015.