GLOBAL WARNING

Conseil en stratégie finance, énergie et climat

Paris, 31 March, 2015

Contribution to the

Competition, choice and conflicts of interest in the credit rating industry

ESMA: European Securities and Markets Authority

Call for evidence – March 2015

About GLOBAL WARNING (GW):

GW is a Paris based leading 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 and launched 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 – juin 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 the 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 with very long-term financing involving energy performance monitoring. The SFTE study was published in november 2014, with a large positive impact (120 G€ of quality investments) on the Juncker Plan announcements.

Global Warning co-founded and is leading shareholder of **Beyond Ratings**, which aims to provide expert analysis on the energy-related risks to the finance industry. One of its first offers is to provide complementary analysis to credit rating agency sovereign risk financial ratings.

Global Warning present contribution to ESMA is linked: (1) with its leading role in the RISKERGY project, especially regarding regulation issues; (2) with its leading role as cofounder of Beyond Ratings.

Because Global Warning is involved in the credit rating industry domain; because Beyond Ratings is an offspring of the RISKERGY project, and could eventually become one day a credit rating agency, Global Warning contribution to the ESMA call for evidence should be classified with the targeted group "CRA" of the inquiry ("5. Questions for credit rating agencies").

Michel LEPETIT

Global Warning CEO

Context and global remarks on the ESMA consultative document

The macroeconomic environment and its long-term 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 gross 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 his diagnostic.

The finance industry has collapsed in 2008 and its healing –under the supervisory agenciesis 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 shall not 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 offspring)
- private: the BRI itself is warning public authorities that ultra low rates are not enough (see BRI march 2015 (Why) Is investment weak?). CAPEXs seem to be weaker than before 2008, and the star CAPEX industry before the oil slump of mid-2014 was the Gas&Oil industry 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. In macro economic uncertainty. In geopolitical uncertainty. In risk and especially sovereign risk uncertainty.

The physical world (or why RISKERGY?)

When ESMA sister regulatory agency, the EBA writes:

« Much less attention has been paid on the interaction <u>between financial regulation and the</u> <u>real economy</u> as well as on the effect of banks' behaviour and business models on the macroeconomic cycles. While in the last years, several regulatory changes have been introduced in the Basel framework for complementing the microprudential goals with a macroprudential perspective, the research in this field is still relatively limited. »

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

Mainstream economists 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 at an IMF Conference 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". 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 much more keen than a simple joke by analogy. This comment is much cleverer than his author ever thought of, 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 and this is 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. And it has been the main driver of economic growth.

 (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. About the dwindling new discoveries figures. 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 US 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 access 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 credit ratings

GW agrees with ESMA that there are many weaknesses in the current approach regarding sovereign risk methodology by CRA.

Three general topics are worth consideration:

- the risk discovery practice in Money markets
- the energy mainstream economist failure
- the sovereign risk specificity

The risk discovery in Money markets

In a 2015 BIS working paper (Understanding the role of debt in the financial system – January 2015), the author explains the differences between the Stock markets and the Money market:

"The purpose of money market is to provide liquidity. Money market trade in debt claims that are backed, explicitly or implicitly, by collateral" ... "The desire to circumvent price discovery is a natural consequence of lending. Lending is a bilateral contract. As the pawning example suggests, price discovery in a bilateral setting is typically very costly (bond market are different, but even they are quite illiquid). Gross characteristics such as credit ratings, the term of the loan and the amount of the loan are, of course, essential for agreeing on a price."... "When new bond re issued, the issue is typically sold in a day or less. Little information is given to the buyer."

There is here a strong paradox. Money markets rely on collateral, and do not need as deep risk analysis as Stock markets.

And the bases of all collateralization are sovereign bonds. The basis of pyramids of collateralized debts.

By past habits, Money market do not spend much more time on this very specific risk analysis. Of course you could say that sovereign debts are themselves collateralized – and it is true in a way- with the "country assets" (its real fiscal potential).

Beyond Ratings is just doing that, when data are available, with the IPSAS approach.

The International Public Sector Accounting Standards (IPSAS) are a set of accrual-based and cash-based accounting standards for public sector entities. They were created and developed by the IPSAS Board, under the scope of the International Federation of Accountants (IFAC) so as to improve the quality and transparency of financial reporting on a national and infranational scale. The OECD was the first international entity to implement the IPSAS in 2000 and was followed by many countries. Today, about 100 countries have adopted or are in the process of adopting these standards.(...) The ISPSAS encompass the valuation and reporting of both financial and non-financial assets. The latters are made of assets divided into two categories: produced (fixed assets such as dwellings and buildings or machinery and equipment, inventories and valuables) and non-produced (natural resources and tangible). (...) Beyond Ratings R&D in this field will focus on valuation of non-financial assets to provide more comprehensive and comparable data sets. The development of a broader assessment of the nations' wealth will therefore shed a new light on the debt sustainability with regards to the countries net worth dynamics.

But this Beyond Ratings approach seems to be unique. And very few countries publish IPSAS.

The energy mainstream economist failure

One weakness of systemic risk analysis concepts is the central assumption that markets are efficient, that they provides the right price and risk 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 economist failures clearly identified now. Mainstream economist underestimate the key role of energy in the wealth of nations.

Given how energy impacts the whole economy, and each sovereign country in detail, these failures prevent short term and long term quality analysis.

Given the importance of energy and given this market signal failures, it is important for regulators that market do not just rely on market signal only. Biased signal. Where price is more important than volumes for instance.

N.B. Even if it is common knowledge that CRA sovereign risk assessment are usually poor, notably when they do not take into account these market failures regarding energy, it would be dangerous to just rely on market signals (like CDS) in the hope that markets will provide the right risk yardstick.

Sovereign risk specificity

Sovereign risk assessment is a difficult enterprise.

The recent work on this specific 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 supervisory agencies.

What treatment should be designed for sovereign debts in Basel IV and Solvency III regulations? This risk is a very specific one, difficult to deal with.

- Sovereign risk is for statistical reasons very different from other risks which measurement is based on large numbers statistically meaningful. PD and LGD are here pure estimates. Besides, the "feedback loop" of sovereign credit risk positively impacted via money creation by the sovereign own decision, 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. It has not changed much since the turn of the century. Time horizon forecast by CRA is usually short (3 years maximum) when debt maturity can be very long, and is somehow lengthening in 2015; and the size of the specialized teams in charge of this risk in CRA is limited. For most of CRA there is no macro economic modeling capability.
- In that sense, benchmarking CRA ratings regarding (1) corporate risk (methods which are well founded and based on well-founded econometrics credit scoring, industry benchmarking, and balance-sheet analysis) with (2) sovereign risk rating appears meaningless. In using such strange "averaging", mixing the wheat and the chaff, in its sovereign risk report, the ESRB is setting a misleading example.

The future could be very different from the past, as explained in this contribution. With hindsight, we can see that, after a time where the "End of History" was in sight (Fukuyama, 1989), the world seems in trouble everywhere these last years. The financial industry knows that the "Great moderation" was just an illusion. Some sovereign debt interest rates are negative. There is a blatant currency war worldwide. Debt maturities are lengthening. Interest rates have not been so low for the last millennium in Europe. More countries seem to "disappear" each year, especially when they are close to some geopolitics energy stakes.

As wrote in march 2015 Bundesbank President in The Way to Make Debt safer:

Currently, the proposal to end the preferential treatment of sovereign debt is being dealt with in the same way as physical exercise. Everybody agrees it's a good thing in theory. But in practice, it's very hard to get off the couch. That's why as of now, sovereign debt denominated in an advanced country's own currency is still considered risk-free. But sovereign debt is not a risk-free asset. That has been demonstrated by the sovereign-debt crisis. Consequently, it needs to be backed by capital, and exposure to a single sovereign must be capped just as it is for any private debtor. The regulatory treatment of sovereign debt is now being discussed by the Basel Committee of financial regulators. But if these discussions fail to produce an agreement, we need to move forward with a European solution.

The following GW contribution will focus on sovereign risk credit rating, even though this is largely applicable to bank risk credit rating (because the obvious link between a sovereign state and its banking system) and to the infrastructure investment risk rating.

Questions

5.2. Minimizing conflict of interest

GW proposes to address this question, with two question marks:

1) If geopolitical issues are at stakes in the sovereign rating field -and they are obviously-, is it wise to have the three largest CRA under a unique non European country control?

One can remember the legitimate debate about Europe independence from non European rating agencies after the 2009 crisis. This is the very debate that led to the creation of ESMA.

2) For a long time, the big CRA have not taken position on the Climate change stakes, for a long time this risk was not considered as a systemic risk. Neither by CRA, but nor by regulatory agencies.

15 years after IPCC first assessment report, It seems that one of the leading CRA considers now some change to its sovereign rating methodology.

Climate Change: Preparing For The Long-Term

Climate Change Is A Global Mega-Trend For Sovereign Risk

It must be stressed that even if there is recognition of the importance of climate change, this worldwide phenomenon is only looked at through its climate impacts. Long term impacts. Not its today anthropogenic causes.

So CO2 anthropogenic emissions are nowhere tackled in this methodology addenda (or rather: minus).

"The degree to which individual countries and societies are going to be affected by warming and changing weather patterns depends largely on actions undertaken by other, often faraway societies. « "Typically such an incentive structure leads to uncooperative outcomes and to no effective risk mitigation."

This vision of climate change systematic risks:

- seems not to be shared by the other big CRAs
- comes very late
- focuses on adaptation with no signal on mitigation issue,

Maybe the expression "conflict of interest" would be too strong to describe this situation. Maybe "lack of interest" would be more adequate. Lack of interest in science.

Q2 & Q3 & Q4 & Q5: The conflict of interest in sovereign risk analysis could seem low. On the other hand, given the underestimated importance of energy role and energy constraints in the global and national economy, the mainstream approach to sovereign risks analysis by big CRA encompasses many prejudice and biases, which somehow could be linked to the country they are incorporated.

5.3. Transparency and disclosure requirements for credit rating agencies

Thanks to transparency, most CRA methodologies appear now for what they are : quite poor, somehow short sighted, thin in their content, and with very few improvements recently or in sight. A lot of users recognize this failure. And prefer to rely on CDS for instance.

This is a huge paradox. ESMA should consider why, given the importance of this sovereign risk assessment, the growing risks worldwide, there is no new entrant in the market –except EIU. This answer is obviously that there is no profitability in this specific business: figures seem to demonstrate that CRA revenues on sovereign risk services are limited.

Besides, unsolicited ratings are common practice.

The "ceiling" correlation is of course well founded, and it emphasizes the importance for the CRA, and for the market, of sovereign debt risk analysis. So CRA are bound to produce theses sovereign risk analyses, solicited or not, at least for the corporate or bank risk analyses (those incorporated in hat country). Which analysis services are highly profitable.

Transparency will not be enough in order to create a competitive sovereign rating market. This will not be enough when an extremely profitable and large segment of the market subsidizes this small one.

ESMA should also consider why, given the approximate methodologies in use by the big CRA, given the non statistical basis of these methodologies, why ratings produced by these CRA are in fact so close? So close that, as a matter of fact, it seems hard to classify these CRA for this specific niche market segment?

Q6 & Q7 & Q8 : transparency and disclosure are not sufficient to enable competition in the sovereign risk rating buiseness

5.4 Disclosure

5.5. Multiple credit ratings

5.6 Mandatory rotation

No comment.

5.7 Compliance costs:

Given the specificity of sovereign risk, ESMA should consider lighter compliance guidelines so that investment can be made on more accurate sovereign risk methodologies.

Q17: it is imperative to have large R&D academic investments in sovereign risk methodology

5.8 Market dynamics and competition between credit rating agencies

Interestingly, after the 2008 collapse, the markets where very positive about emerging countries opportunities. Europe was supposedly safe.

In 2015 there is no longer anyone pretending that emerging countries are the Eldorado. Nor that Europe is safe.

There is sovereign risk everywhere.

Q18: Regulation -and past habits- are of course the principle causes of the situation regarding sovereign risk analysis and sovereign rating. Even though every one agrees the risk measurement by CRA is weak —to say the least- everyone seem to be satisfied by the systemic risk which this situation implies.

Actors seem to be satisfied by this awkward situation. And CRA won't make any effort nor investment in order to improve their methodology, making no money directly on this asset class. Even more, this a cause for concern for CRA, being sometimes publicly rebuked by political leaders.

You can find CRA reports on many countries, where the words "energy" or "oil" are not even mentioned. Is it really possible to assess most of the countries –if not all- without stressing the energy-related issues: Brazil? Russia? Indonesia? South Africa? Germany? Canada? United States? Argentina? Japan? ...

Q19: There should be a focus by CRA on quality and depth of their sovereign risk analysis, taking into account global and national energy-related issues

Because sovereign rating spill-over all other kinds of asset ratings, and banks linked to the sovereign very strongly (via localization of incorporation), improved methodology based of real economy and energy could be useful in assessing banking risks as well as corporate risk.

Q20: Energy-based methodologies could be a building block used for all kind of corporate ratings and banks risk analyses.

Given today situation and regulations, there will be no change in the sovereign debt ratings market shares in the coming future. Because of the high quality of its experts, EIU just disturbed a little bit the CRA oligopoly.

Q21 & Q22 : GW see no change past, present and future in the sovereign risk rating

Of course this is not the mission of ESMA to define credit risk methodology. Still, ESMA could audit the situation and observe:

- the light competition in this asset risk rating segment
- the weak opinion, even from the market users, about the quality of these ratings
- the simplistic bases to the methodologies
- the impact these ratings have on all asset classes

Q23: ESMA should acknowledge the paradox. Never sovereign risks have been so high. Never the competition has been so non-existent.

GW proposes a much more proactive attitude from ESMA regarding CRA methodologies.

Conclusions

Ratings are supposed to be removed from financial regulations by 2020. Five years from this deadline, seven years after the 2008 collapse, GW does not see the slightest progress in this direction regarding sovereign risk ratings. (see JCESA (Joint Committee of the European Supervisory Authorities) - Discussion paper: the use of credit ratings by financial Intermediaries – 23 December 2014)

This awkward situation causes a real systemic risk.

Regulation aim is first about « preventing systemic risks ». But it cannot be "only" preventing once again the next short term "2008 collapse".

And regarding sovereign risk rating, because of very poor analysis practices, because of herd behavior, a new crisis could happen again.

ESMA should provide the correct incentives for all the actors of the Money markets to have a strong interest and involvement in quality sovereign debt risks analyses. And to rely less and less on mainstream analyses.

Actors should consider worldwide agreed scientific fact and policy objectives, regarding energy and carbon challenges.

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

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- ESMA 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 III; Basel IV) so that key subjects like long-term finance —at the heart of the energy transition—are properly addressed globally.
- ESMA should support the creation of an independent world energy agency (Intergovernmental Panel on Carbon and Energy Transition), shared with other financial regulators.
- every new regulation reviewed by ESMA should have an impact assessment on the energy and carbon transition issues