

**While the Crisis Proceeds:
A World Redistribution of Economic Power?**

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**While the crisis proceeds:
A world redistribution of economic power?♦**

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Abstract

The crisis has drawn attention to the fact that not only emerging powers but other regions of the world as well may be offering different development models and may constitute into alternative, in some dimensions more positive agents, in the conduct of the present stage of globalisation. Notwithstanding, the traditional western powers have not lost a large amount of control of the world economy. And the crisis proceeds, reallocating world power as in a Hobbesian anarchy. It is difficult to foresee smooth developments in the near future. On the contrary, multilateralism seems to be losing ground to unilateral action or bilateral arrangements. More or less disguised currency wars may lead to serious disequilibria, and turf wars may become more frequent, with motives ranging from securing captive markets to control of specific commodities and energy goods, or targeted regulatory frameworks. As economic policy becomes even more involved with defence and security affairs, the feedbacks from each side to the other seem likely to keep dissent and animosity high, rather than contributing to peaceful and constructive approaches. A more trouble-prone world may be easily expected.

♦ This work was first presented at the 1st Pre-Conference on “Interdisciplinary perspectives on the Global Financial Crisis” held at the Academia das Ciências de Lisboa, a project in partnership with the Center for Globalization and Governance (CG&G) and ICT-Tropical Knowledge which was included in the African Development Successes module at NOVA School of Business and Economics (NOVASBE) summarized in annex. I am indebted to the participants in both events and, very specially, to Jorge Braga de Macedo who encouraged me to write this text and with whom I have been entertaining a most rewarding, joyful and hopefully unending conversation on many of these ideas. Graça Silva’s unfailing dedication and formidable efficiency were at the heart of making possible the two presentations. I remain solely responsible for all that follows.

0. Prologue.

“Your Majesty,

The fall of the Constantinople market had indeed dramatic consequences on all trade and financial flows and institutions.

Those Byzantine traders had for sure overdone. While they focussed on the internal logic of the myriad of products they traded and discussed, including rather exotic options on the timing of the Holy Trinity, they forgot the global picture, overlooking the several and intertwined derivations of their multiple actions.

We apologise for the pun, but the Byzantine rulers were lost in a Byzantine mesh of regulations and bureaucracy whose global view nobody held any more.

NINJA¹ borrowers, from the seven oceans, were menacing the security of the city markets since long. The Rumeli junk bonds – traded also by the Greeks (again ?), under the name of Laimokopias bonds – were a clear threat. Hedging strategies were used, but in exactly the opposite way ! making more pervasive the entrances to the city markets. The Theodosian Walls Hedge Fund, completely exposed to attacks, was particularly vulnerable. But the authorities kept saying they were the safest guardians of internal stability !

Eventually, those turbaned NINJA, originating from the Anatolian slums, where they lived below the Holy Eastern Empire Poverty Line, made it. What collapsed first? The Theodosian Walls, of course. This young man Mehmet II, a former head of a Janissaries’ NGO (now, sheer establishment) is really competent.

The shock waves due to the fall brought fear and disruption to all realms. Several meetings of different K-X² groups were held in the most pleasant castles overlooking our greener fiefs, trying to find new regulations to avert the tide of disaster.

Beyond the kings themselves, the imposing delegations comprised numerous wise and fat dignitaries, not to mention the cook himself and, at least, half a dozen jokers. Funnily enough, many times the king played a dual role, acting also as a joker.

No really new idea emerged, beyond using the cereals tax (extracted in great part from the poorer farmers) to rescue those guilds considered “too big to fail”, and a few powerful or trendy craftsmen who supplied the Western and Eastern courts as well.

¹ NINJA = Non Imperial Nomad Johns Around.

² Your Highness, the X stands for the number of kingdoms (K) involved in each group. This notation has become very fancy.

Whenever discussion touched a more reasonable use of the imperial coffers and vaults of precious stones, the meeting was adjourned for the festivities offered by the castle owner. In spite of the dire situation, these were extremely merry, as shown by the few icons depicting some of them: big smiles systematically pervade all royal faces.

At every new gathering, enthusiasm decreased; from now and then, a little and nervous king promised to revamp the whole agenda.

The solution, Your Highness, came neither from new regulations, nor from talkative masters, but from a taciturn, curious people who lived in a secondary market in the tip of the Atlantic European coast. They kept looking at the sea for long periods, and enjoyed climbing down perilous cliffs for a quick jump into its waters.

But they changed completely the narrative of the crisis, by creating a new grammar and a new syntax. Indeed, an old order and a great Empire had collapsed, and only innovation could have rescued us.

Suddenly, those without their products and instruments became outdated. They found new ways to invigorate business, markets were completed and stock markets bloomed in China, India and in odd tropical lands where everybody, with Your pardon, works and dances stark naked!

Though the narrative was different, the themes and goals were pretty the same: solid fixed income instruments, highly rewarding risky ventures.

Undoubtedly, a tremendous shift in the balance of power took place, and new voices are asserting themselves.

Many want to revive one of the merriest K-X, also known as the Holy League. That bloke Mehmet now calls Constantinople by another name, used by his turbaned fellows (it sounds like 'Eashtanbool'). He promised to keep the Central Soul's Bank of Hagya Sofia, to please the Christian traders, though Muslim practices will be introduced there. One (qualitative) forecaster even said that, one day, those people will build a fabulous mosque, all in splendid blue tiles.

Tensions are mounting everywhere, including (one more time!) in the Greek coast. New Italian and German hedge funds and modern banks are blooming, but some say their position is shaky.

We are afraid everything will start over soon.

”

Imagine Queen Elisabeth II, after having summoned two bright economists of the kingdom to explain to her the recent crisis, receiving a few days later the above letter.

At a first glance, She must have thought that Her two earnest subjects, overwhelmed by the responsibility upon their shoulders, went to one of those nice and joyful pubs of the City to collect real data. In the course of the enquiries, more relaxed and inspired – and perhaps a bit tipsy –, both had produced such a non-sense.

However, being a fast and bright mind, the Queen, on second thoughts, might ask Herself whether perhaps there wasn't something in it. Maybe it was – as in the cabalistic writings – a disguised way to convey some truths, a few ideas ...

My perception goes in the same direction.

Notwithstanding the silly or funny aspects of the above letter – both are in the eyes of the reader -, and its far-fetched analogies, it summarises part of my views on the crisis. They are explained in a hopefully more sober way in the next lines.

The structure of the discussion – which must also be seen as part of an ongoing interdisciplinary dialogue, co-ordinated by the Lisbon Academy of Sciences - is as follows.

In the first section, I argue that the crisis is far from being over. In its continuous unfolding it poses fundamental questions on the structure of the prevailing order. Some of the arguments in this section are repeated under different guises in the next ones, as behind all this and any discussion on the theme of the Pre-Conference lies an enormous dilemma: what alternative do we have for the present order ?

Combining basic geo-political considerations with the economic facts may change the way to look at, and forecast the consequences of the crisis. Not only as regards the limited debate on “when will the recession end ?”, but also in the way to consider several pieces of after-crisis rhetoric, as “better and increased regulation of financial markets”. Sections 2 and 3 elaborate on this, in an effort to embed such questions into a broader, more fundamental concern.

The financial crisis has undoubtedly meant a shift in wealth from the developed western North to the Eastern and Southern regions of the globe. However, this broadly acknowledged point raises not a few questions, some of them being addressed in section 4. Finally, section 5 concludes, or rather, opens the way to more relevant, and difficult, lines of enquiry.

1. The crisis is not over yet.

The first point to be left clear is that the crisis hasn't finished yet. A peak was reached in 2008/2009 but, to avoid a senseless semantic argument on the characterisation of the word crisis, let me state that it continues to unfold.

As the 1929 "recession" only ended with the second world war, from which a new economic-power reality emerged, the present crisis, like a milder tsunami, marches in, sweeping structures, economic agents and established arrangements in its way.

The "euro crisis", the "US budget crisis", "the high price of food and commodities in general" are all different aspects of the trajectory followed by *the crisis*. It left open injuries that, respectively, date from the Maastricht arrangement, the profligate US spending, partially backed by the US dollar credibility, and the distortions in the food market, not the least caused by absurd protectionist policies and selfish hedging and storage strategies.

Like in any system, after each shock, its components and agents try to recover their previous positions, pursuing strategies or taking positions that would lead them to the initial, pre-crisis format. This is evident in the solutions proposed and tools disposed for implementing them in the three faces of the crisis just mentioned. But they, and most of the nowadays other "crises", need global though lateral, innovative solutions.

The euro crisis is a European problem indeed, however its solution shares common facets with measures that must be seriously implemented – and have not yet – after the 2008/2009 episodes. Moreover, it should take into account what its present state of flux means for the rest of the world, even though in practical terms the actual shocks reaching economies like Brazil, for instance, are of low intensity until now.

Sentences as the above ones may lead some to think that I'm pledging for quick fixtures to mend each separate burst. Yes, but with an encompassing view. Not only this; crises imply pain. Sectors, corporations, groups of people are inevitably hurt. There is no solution without losses and cuts. The single-minded efforts until now have been, faithful to the resilient features of any well-established system, in the direction of restoring the traditional order, its elements and procedures. This unavoidably leads to a way out that heavily hurts the less powerful, the less organised and less vocal segments.

It is hard to envisage a solution to the euro problem without boldly facing the situation of the banks in the euro zone that hold considerable amounts of rotten assets.

Their situation may be streamlined either by rescue – and then funds must come from somewhere, as it has been pursued until now – or by controlled bankruptcy. In the latter, perhaps fairer approach, things could be much easier if, for instance, Greece quits the euro zone. Why stick to preserving a failed arrangement if a(n initially) more painful recipe, but hurting powerful agents who did wrong, would perhaps be wiser and socially more decent?

It is also hard to envisage a solution to the euro problem through half baked concoctions that indirectly address the core problem, as it has been tried until now³. Without moving from the Maastricht criteria to a sizeable common budget for the euro-zone – the right way also to enable a co-ordinate unified issuance of euro bonds -, devaluing the euro and, very likely, reducing its members, the euro will linger on as an unstable, weak and troublesome currency.

It is hard to envisage a solution to US problems without fully addressing the limits of its projection of Power in the modern world. The troubled hegemon faces today a riddle similar to the one posed to the Roman Empire when at the heights of its expansion: how many legions could they support, without compromising the social and investment demands in the always restless and effervescent Rome? (Gaius Julius Caesar) Augustus (63 BC; AD 14), the shrewd risk-avertter first Caesar, had during his time traced the limits he thought wise for the Empire. Beyond the established borders, security would be assured by a host of client states and bold diplomatic achievements, the key one being a peace settlement with the Parthians (ancient Persia)⁴. Mr. Obama is doomed to do the same, at the risk of internal and external turmoil ...

This kind of bolder and more courageous approach, sometimes demanding creative, lateral thinking, seems to be missing since 2008/2009, being replaced by a sometimes excited and always shallow rhetoric on co-operation and dialogue – undeniably important behaviours – that has been delivering not much, and when it does, it is usually more of the same.

But it is not easy to open to a dark, in many ways unknown void a solidly locked door. As a result, we're caught in vicious circles of solutions, pointed out by the more perceptive critics.

³ The last one, as of the week ending on July 22, 2011, being a modest version of the old 'Brady Plan', devised by US Secretary James Brady, for the huge Brazilian debt crisis, inspired in ideas by former Brazilian debt negotiator and Minister of Finance, Luiz Carlos Bresser Pereira.

⁴ I owe this analogy to conversations with Carlos Ivan Simonsen Leal.

From one hand, many agree that drawing on the less organised and poorer social classes to save the financial institutions (fis) is unfair and problematic, beyond the fact that this solution is usually accompanied by severe growth-reducing measures; but on the other hand, without quick fixes, too important fis may collapse, also spreading havoc to the economies and ... the poor. Half a dozen examples of this kind of dilemma can be produced⁵, as a sad illustration of the lack of alternatives brought by the lack of creativity.

Another feature this study group⁶ is trying to address, and that is sometimes raised as an excuse for the present hard times, is the recurrent or oscillatory pattern of the crises in twentieth century capitalism⁷.

Without elaborating further, or getting to more technical details, one characteristic of oscillatory systems is that, contrary to very sharp but continuous changes – like in the celebrated stochastic process known as the Brownian Motion⁸ – oscillatory trajectories change smoothly from peak to trough, the duration of each extreme being variable and possibly long.

Though the idea that we are still sailing the height of the crisis qualifies all the arguments in this paper, real oscillatory systems in nature hardly show a steady, constant trend. In reviewing J. Madrick's "Age of Greed: the Triumph of Finance and the Decline of America", Krugman and Wells (2011) point out that, as regards the troubles involving Citicorp (and usually caused by its own unbridled operations) a recurrent pattern is evident, with crises as the malaise of the seventies, the bailouts of 1978 (Chrysler) and 1984 (Continental Illinois), and the technology bubble of the nineties with its international unfolding. Only that each time the damage gets bigger.

Oscillations are usually either damped or amplified, leading either to a negligible or to an explosive behaviour. The fruitless efforts to dampen the present wave, in dire neglect to the causes of its inherently explosive dynamics, are also a main contention of this text.

⁵ Slavoj Žižek, in the first part of Žižek (2009), interestingly elaborates on the example given in the text; though I do not entirely subscribe to the solutions he later proposes.

⁶ I refer to the interdisciplinary group and the Lisbon meeting that motivated this work.

⁷ Rui Malhó dwelt upon this, during the Pre-Conference at the Lisbon Academy.

⁸ In formal mathematical terms, the trajectories of a Brownian Motion though continuous are nowhere differentiable, being a non-trivial example of a function with such property.

2. Vapid Rhetoric and the Quest for the Holy Explanation.

2.1. The vapid rhetoric on greater regulation of financial markets⁹.

There is no need to reproduce the several steps that led to the crisis bluntly evident and widespread during 2009. Early announcements can be traced back to 2007, at least¹⁰, while unfettered use and development of derivatives was growing exponentially.

As known, derivative products can be created nearly out of anything – from expected movements of the price of a share to a likely rainfall – and produce a cascade of potential debts whose primary source quickly becomes unfathomable. When tied to loans or mortgages, they get twice more explosive. Notable among these are the CDS – Credit Default Swaps, which transfer to third, fourth, and so on ... partners, an initial, concrete debt; usually large sums, not infrequently related to government backed operations.

If derivatives distribute risk – what, in itself, is not bad -, they at the same time spread it to otherwise safe markets. Banks, financial *boutiques*, private enterprises, local governments, almost everybody connected in some way to the global financial system freely indulged in the use of derivatives, many linked to the sub-prime loans, given the extent and pervasiveness of U.S. finance. German state banks, for instance, were big buyers of mortgage-backed products, marketed by U.S. banks, as well as of highly leveraged assets in weak Euro economies.

When the original risky loans started to collapse, the related derivatives went into default, and, like a castle of cards, also those agents who held them in exaggerated proportions. The rest is well known, from banks to economies and governments in trouble, from the U.K. and the U.S. to newcomers like Dubai, the Eastern European economies and, in a second move, to the Euro-zone.

The first, overall reaction, but mostly in the advanced economies, was to blame the absence of control of a large share of financial operations – those with derivatives naturally included – and menace culprits with neither rescue nor sympathy. This was the rhetoric around the first semester of 2009 and, indeed, countries with tougher banking regulations, like Brazil and Canada, had coped reasonably well with

⁹ This argument was initially raised in Flôres (2010a).

¹⁰ In early 2009, Richard Posner (2009) already fully discussed the “crisis of ’08” (and the title of his book was ‘A Failure of Capitalism’ ...).

the ill winds¹¹. The IMF, which was ready to hibernate for lack of prospective borrowers¹², rose back in glory, as a major player in the needed refurbishing of the international financial order.

But as the end of the year approached, and the crisis was however beginning to seem to be contained, the innumerable working groups and special meetings dispensed less caustic communiqués, as well as less orthodox ideas to fix, with rigour, the system. Not much did happen though. From the April 2009 London meeting of the G20¹³, to the April 2011 one, under the French presidency, a downward slope of non-achievements or nearly irrelevant measures, with perhaps one or two exceptions, is manifest.

Out of the many factors that explain this fairly disappointing sequence of events, two seem important to understand.

First and foremost, the regulatory interests are not clear and involve goals that differ according to the position of the country in the world distribution of power. It is important to point out that less advanced G19* economies, Brazil in particular, were deeply involved in the working groups. Though the crisis had treated them lighter, they truly believed that this could open the way to achieve a less wild global operation of the financial system, whose headquarters, as known, do not lie in their territories.

Secondly, a more conceptual issue plays a key role. By its very essence, of all sectors in the economy, the financial system is the one most difficult to control. In its modern *Gestalt*, it needs continuous innovation, unending creation of new products and strategies that will make room for arbitrage, the essential characteristic allowing for quick and huge profits. As long as a new product becomes widely known, and its related market then functions in a more orderly fashion, it can remain as an option for the risk averter, but no longer qualifies as the top asset that will make fortunes sway hands.

¹¹ For Brazil, an account of how it faced the 2008/2009 peak may be found in Flôres (2010b).

¹² I draw, and not for the first time, this lovely image of international institutions never actually ending but, like big white bears, taking long hibernating periods, from Gary Hufbauer, from the Peterson Institute of Economics, Washington, D.C.

¹³ The G20 was created in 1999, incorporating 11 big economies outside the G8 and with the aim of being the forum for discussing global financial issues, though in a less encompassing way than the one adopted in the crisis. It has a rotating presidency and meets twice every year. The European Union is the odd twentieth member, under the no-comments excuse that systemic issues oblige it to seat in this *group of nations*. In all kindness, and with due respect to the wonderful European project, I shall refer onwards in the text to the G19*, to remind the reader of this subtle abuse of institutional world power.

The above implies that regulation is doomed to apply to a well defined circle within the sector, while well-informed agents *outside the regulatory perimeter* will be busy creating new products and acting according to a fairly loose market discipline.

Before the crisis, commercial banks lay in the core of the regulated circle, with investment banks, hedge funds, insurance companies and all sorts of asset managers making for a huge army of well-informed, unbridled operators. As 2009 didactically showed, poor market discipline among the latter spilled over to the regulated, apparently safe circle, obliging governments to play an unusually active role to prevent catastrophe.

The area of the circle can, and very likely will, be enlarged; indirect controls may be attached to some outside. But reversing this pattern looks impossible.

Of course, the whole sector may be smothered and reduced to an improved, modern version of the old banking system, with not even sweeps allowed¹⁴. Though theoretically feasible, it is hard to believe this will happen, and the reason is simple: nobody wants it, or at least those who detain the power to do it.

The motives explaining this inner and now - contrary to the first point - nearly widespread resistance to such a drastic change are varied, but a main one is that the financial system, ironically, is the oxygen of the nowadays world economy. Despite producing extra fat for the “well-informed” group, it supplies capital for the major needs of a global economy. If curbed in excess, this supply will dry up and we shall be back to a more autarchic environment, with less world-encompassing projects and a much reduced flow of goods, services, people and ... funds¹⁵.

The special kind of activities of the financial galaxy *should then* be conducted under an enabling regulatory framework not easy to be designed. This also implies that, here more than perhaps any other sector, regulatory failure can be very distorting. For the minimally normal operation of the financial status quo, worse than not regulating may be excessive regulation that ends up by stifling parts of the system, while failing to be implemented and enforced in others. This ends by adding further costs to society and helping to discredit regulators, increasing the lack of trust in the system.

¹⁴ By the *sweeps* mechanism, depositors are allowed to move their money from a standard account to an investment fund, bringing back each time only the amount needed to pay an incoming, specific debt. This simple mechanism, nowadays widespread, is fundamental to give investment funds scale for performing their various deals.

¹⁵ And we are back to one of the vicious circles mentioned in the previous section ...

Discussing a new architecture for the system goes beyond the sheer financial narrative. It must eventually encompass the whole functioning of the present world economy, its production system and its trade and investment dimensions. It must face the issue that the Federal Reserve still is, but for the name, the world central bank. And this world central bank is located in the country where exactly some of the most radical changes must take place. The turn in the mood of the communiqués and resolutions, watched as 2009 went by, bears evidence on how this ticklish theme will essentially not be solved in the near future.

After the initial bold US and British decisions related to the first banks in trouble – and the boldest one was perhaps the Lehman Brothers' collapse, in September 2008 –, bailouts, funded by the taxpayers' pockets, conspicuously entered stage, to rescue, in a more or less sophisticated way other agents in distress. As a subsidiary proof of the main argument above, the fis revealed themselves too big, too enmeshed with the global economy to subsume. Their fall would precipitate that of factories, offices and small businesses; in other words, the loss of more jobs and ... votes. No wonder, one of the regulatory proposals aired – and still somehow under discussion - advocated the splitting of the big banks, so that in a system made of smaller units, bad behaviour could be more easily punished with bankruptcy.

Concern with big banks or similar agents led to coining the acronym SIFI – Systemically Important Financial Institutions, but perhaps the real focus should be on the “SIFS” - Systemically Important Financial Sub-sectors, given the way how, through interconnectedness, leverage of a given sub-sector can spread damage over numerous institutions, independently of their size. Anyhow, either on SIFI, SIFS or ‘network crucial institutions’, the discussion is doomed to linger on for quite a long time.

Meanwhile, the basic pattern of the system, as outlined here, will remain untouched, and its key characteristics largely unaffected. Customised innovation and accounting creativity will only be spurred again by the new constraints, and the financial sector will thrive on.

Due to all this, emerging countries, that were not at the origin of the crisis and which seriously engaged in the G19* efforts during 2009-2010, look unconvincingly at the whole present vapid rhetoric. Though coveted nowadays, as investment heavens and new sources of prosperity, their voice is still limited. They perhaps would prefer to step aside of this *opera buffa*, risking very rapidly to become *tragica*; but they share a broadly common fate.

2.2. The Quest for the Holy Grail of Explanations.

Soon after the crisis had hit hard the main markets, many economists and commentators started to search for explanations for the (surprisingly unexpected!) catastrophe. The call by Queen Elizabeth II, from the United Kingdom, which is at the heart of the present Conference, is, at a first reading, a good example of a sensible question put by an honest, reasonable mind: Why did it happen ? How could it be that nobody (particularly you, dear economists) perceived it in time ?

Some savvy analysts, like Nouriel Roubini¹⁶, had warned about the looming dangers of the ongoing disarrays, but other bright minds, with the benefit of hindsight, turned to the task of finding *the explanation* to the events. Rajan (2010) and Reinhart and Rogoff (2009) are but two out of the interesting studies then launched, by scholars with undeniably solid knowledge.

At the same time, the quants themselves fumbled for excuses or rather theories that would either justify their behaviour or transfer the potential blame to other instances of the complex engineering of modern finance¹⁷. In the midst of this trend, a work just recently delivered by Taleb (2007), regained some notoriety.

In the same vein, but with a broader view, Macedo (2010) tries to enlarge the portfolio of interpretations, by adding the groupthink effect and the precarious percolation of information and alert signals in complex governmental and financial institutions.

All these attempts add a piece of knowledge, sometimes even precious, though all suffer from an original sin. With different nuances, they provide explanations within the system, that share in their innermost core, either a full or a less-well perceived faith in the righteousness of the status quo, in spite of its several misdeeds, and an unquestionable will to restore the game, with due corrections, as it posed itself *before the crisis*.

I hope not to be usurping these authors' minds, or overstretching the reach of a textual and conceptual analysis, when I state this. But Reinhart and Rogoff (2009) and Rajan (2010), though providing good analyses and a few fresh insights, neither touch

¹⁶ Roubini was no newcomer to the study of crises, as many of his earlier works testify (see, for instance, Corsetti et al. (1999)).

¹⁷ Rui Vilela Mendes produced, at the Pre-Conference, a well-organised and didactic survey of the main attempts in this line.

the heart of the matter nor offer really new and courageous routers to sail out of the stand still and its vicious vortexes.

The situation is even worse in the case of the quants, who blindly operated trading strategies inspired in models from stochastic physics, backed by very debatable assumptions and logical arguments – as the absence of arbitrage -, at a volume and frequency that demanded a far more serious attention to the surrounding constraints. As for Taleb (2007)'s work, definitely well written and argued, its revived notoriety should largely be attributed to the ignorance the general public always had on deeper statistical ideas.

Moreover, stochastic processes, though allowing for fluctuations and even sharp swings, have trouble in portraying sudden and violent disruptions. Either they work under the stationarity and, often disregarded, ergodicity hypotheses, which embody, in some way, past behaviour, or they allow for non-stationarity. But non-stationarity still is a Pandora box of myriads of likely possibilities, the few tractable *representations* available¹⁸ suffering from adequate treatment of disruptive, drastic effects. Superimposing jump or extreme value processes is an enlightening modelling tool – specially for value-at-risk computations, but does not account for an explanation.

The groupthink argument, originally raised by Janis (1972) in the context of foreign policy analysis, has the merit of bringing to the debate decision-making patterns akin to the complex operations at stake, beyond leaving more clear the ground for the identification of criminal, or at least extremely socially irresponsible behaviour. The latter is usually circumvented in most explanations, but of utmost importance for streamlining several facets of the present system.

In Janis's own view, in the groupthink process, group norms and patterns take over, resulting in deeply flawed decisions. The group is valued above the quality of information processing, dissent is discouraged if not suppressed, assumptions by the leader or highly regarded advisors or technicians go unquestioned, and all kinds of biases influence policy. The result is what he termed "premature consensus" and this strongly seems to have been the case in both complex fis and the supervising authorities.

But groups in charge of so important operations do not live in a cloud: they have directors, supervisors, key managers who must account for their behaviour, and this

¹⁸ Of which, the rather local, not to say often silly, "unit root hypothesis" experienced unduly notoriety until nearly a decade ago.

makes for the need to pursue the groupthink argument in the juridical, eventually penal direction. Moreover, as researchers in international relations duly show, Haney (1994), Schafer and Crichlow (1999, 2002), the groupthink hypothesis must be subject to proper statistical tests, and they are wanting in the crisis study.

The percolation idea is qualitatively appealing. However, the sophistication of its related theory¹⁹ makes any test of it as one of the contributing factors for the crisis a very hard though not impossible task.

The fact that each approach adds one or several grains of insight is an indicator that perhaps this explanatory Holy Grail that will shed light on every dark cause of the crisis does not exist. From the inner operation of the system, anchored in more or less historical, economic, behavioural or statistical arguments, and drawing on the power of fast connectivity, or on the vagaries of the Fed's monetary policy, one can at best produce chains of *causal relations*, but **the crisis** as a global entity is more than these identified sequences of failures. It lies within the system itself and signals that a major transformation is in progress.

By stating the last paragraph I do not want to blur the different serious attempts above in a sceptical no-man's land, where no explanations are possible or every explanation is good. They have their place, though limited. To fully understand the crisis, its ongoing process must continue to be observed, and its more remote impacts detected. That's what I try to sketch in the next two sections.

3. Talking about real power.

Though informal calculations show that the crisis has meant more than a blip in the continuous money flows from the western North to the East and the South (less, in the latter), more than increasing the transfer rate, it has exacerbated the fragile economic conditions in the US and Europe. With countries like China and Singapore, passing by Japan, Taiwan and even Thailand, stuffed with dollars, US Treasury Bonds and euros in their safes, the credibility of these key currencies is perhaps more than ever at risk. However, efforts towards diversification of these currencies portfolios are still in the beginning, and the range of alternatives cannot be said to be very attractive.

¹⁹ See Stauffer (1985), for a sound introduction to the subject.

Beyond a redistribution of power – which, by any case, was and is taking place; the question being at what pace –, the crisis has increased inter-dependency and added a new twist to the dollar and euro problems. Among the trio formed by these two and the Chinese renminbi, competitive devaluations are taking place in a more or less disguised way. In the face of the US quantitative easing and the subtle though firm Chinese policy, the euro has been more resilient, though its devaluation seems a matter of time. The outcome of this silent war may have unexpected changes in the flow of funds, attenuating or increasing the transfers to the East.

But power can also be ascertained by the rule-making capacity of the different actors, and what has been seen until now is the ‘classical US-western Europe plus standard allies’ order sticking to its long-acquired positions.

If the optimistic regulatory frenzy, prevailing during the G19* meetings at the height of the crisis, has considerably faded out, established powers, through dominant positions at the IMF, OEDC and other international forums or intelligence generating institutions, are recovering leadership in the main themes and fashioning both the rhetoric and the proposals to their basic interests and needs.

The greater awareness triggered by the crisis, that other voices and regions should have more space, is still far from producing more sensible and sustainable changes. Besides the subdued currency war, a regulatory war – involving state and powerful private actors, Büthe and Mattli (2011) – will progressively gain momentum.

Enlarging the strictly financial perspective, trade and investment flows, ownership of, as well as research and fresh investment in, the different strategic or leading economic sectors, and the associated required educational and innovation skills, are movements that can add serious constraints to broad statements on power shift.

Authors like Mahbubani (2008) alert that Asia has presented a remarkable progress in many areas. A recent study of the Royal Society (U.K.)²⁰ has shown that countries like Iran and Turkey have been experiencing surprisingly fast achievements in most standard science & technology indicators. China, in its turn, has been pursuing a bold strategy in science and technology to match or surpass the US by 2020, Angang (2010; particularly chapters 5 and 6).

Notwithstanding, innovation cores and educational excellence spots are still so abundant in the advanced western countries that they may secure them, for quite a time,

²⁰ Co-ordinated by Sir Chris Llewellyn Smith, University of Oxford, and made public in the first quarter of 2011.

if not complete leadership at least a highly competitive position. They still hold a considerable chunk of assets and human capital and, most specially, innovation capabilities, to guarantee them strong positions in this field.

Moreover, in spite of the shifts eastwards, roughly around 2/3 of the international market for goods and services is in the US and the EU and no economic actual or aspiring power can do without access to these key markets. The normal and healthy operation of the latter can be paradoxically considered a pre-requisite for the very changes in their own predominant positions - and we fall in another of the vicious circles announced in section 2.

Behind economic power lies **Power itself**, as embodied in sheer military and offensive capabilities. Actual control, in *real Politik* terms, boils down to two dimensions: control of governance of key international institutions and systems and military power.

The heightened debate on defence expenditures in the US – for sure, aggravated by the financial crisis –, together with more assertive positions by giants like China and India, or more independent actors like Pakistan, Iran and even non-opponents like Turkey or Brazil, is progressively obliging it to glide from its hegemonic status to a shared sovereignty one.

The crisis has definitely put more pressure on fiscal problems that were looming since quite a few years in the US and the EU, and the budgetary constraint may lead to a manifold of developments, some out of the strict realm of economics. Reduced US military clout may be a significant one. This, in turn, may eventually entail a further weakening in its economic position.

A weaker, or simply more contained US triggers unpredictable developments, from Africa to the large Middle East, passing through the old Soviet Union states and closing the loop in the Caribbean. Power, as in the outcome of a likely currency war, may swing to and fro for quite sometime. Before a new, shared equilibrium is achieved, tensions and undecided situations, if not local conflicts, will take place.

Perhaps the most dramatic example in the above context has to do with control of the seas. To put it briefly, since the end of World War II the US has provided, as a kind of free public good to all other nations, the security of the seven oceans. Not that this would not suit US commercial and strategic interests, but it is undeniable that any given country enjoyed safe sea lanes for its trading vessels throughout the globe.

However, China and India are pursuing technological developments, intensive training programmes and foreign buys aiming at considerably increasing their sea power, to protect what they consider to be their “interior seas”. To this it must be added the growing instability in the North of Africa, reaching the obscure (to many) island state of Bahrain, which simply hosts the Fifth Fleet, a key US projection in the Persian Gulf and actually in the whole Indian Ocean.

This by no means implies that US sea-power will vanish tomorrow or that China or India will, in the short run, take over responsibilities up to a point further from their coast²¹. Notwithstanding, the speed of these changes will be conditioned not only by that of revamping and upgrading in the two Asian navies, but also by the pattern of contractions in the US budget and the recovery path of its economy.

World governance, broadly speaking, is in a state of flux, but north-western powers still hold a mighty grip in most niches. This is true of the World Bank and the resurrect IMF, as mentioned above, and also of the present arrangement of the UN Security Council. In spite of being increasingly contested in all these assemblies, the established powers still show a most of the times consistent stance that secures their combined maintenance of key posts²².

Anchored in the top positions they control, developed economies continue to be the major source of international regulation, spreading their (technical) soft power to all corners of the planet. The EU may be suffering from a serious illness in the euro-zone, but this did not either avoid or stop its nearly spreading havoc in the international chemical goods markets through its REACH (Registration, Evaluation, Authorisation and Restriction of Chemical Substances) initiative²³. Probably and unfortunately, “REACH” will trigger a little trade war when other countries start to implement retaliations to its over-doings.

From turf wars around Security Council membership to those for the control of international bodies like FIFA and the Olympic Committee – that oversee, directly or indirectly, fortunes related to their events – the advanced economies are in good and combative shape to guard their advantages.

²¹ Though, for authors like Valencia (2010), the situation is already approaching high tension.

²² A brand new illustration of this has been the replacement of M. Strauss-Khan by Mme. Lagarde, also a French citizen, in the IMF. Emerging and developing nations, as it many times happens, were unable to consistently present a competitive alternative.

²³ Actually Regulation EC 1907/2006, which entered into force (first phase) on June 1, 2010.

Nevertheless, in overall terms, and as regards tendencies, the dominance here outlined is less stable than it seems. The crisis, by shortening the availability of cash and bringing to light shakier aspects of the western governments and their associated welfare & consumption states, has opened cracks in the building. Areas where trouble was expected in a later future now seem closer to become tension spots.

4. The new actors.

An interesting contrast with the previous line regards the so-called emerging markets, which are far from a homogenous group.

Until when will they continue “to emerge”? and emerge towards what? Taking the BRICS, for example, can one envisage in the coming 20 to perhaps 50 years a world in which a “BRICS market” would be sustainable without the US-EU consumers?

In larger time-horizons this may come true, with a vigorous Africa, greater production diversification and income equality in the Middle-East economies, and continually rising living standards in South America, Southeast Asia and the whole Chinese periphery. But we certainly are still far from it now.

However, having started nearly as a playful clustering of a bunch of large countries, the BRICS exercise has been quietly delivering a novel message²⁴. In a half formal but regular basis, these big economies have been holding meetings, talking to and getting to know each other, and calmly searching common views and positions on selected world issues. In a few instances, like in the recent Libyan affair at the UN, they worked in a concerted way.

This practice signals perhaps a new road for dialogue in the international arena that might bear some creative alternatives. In a similar mode, the loosely connected but quite efficient ASEAN+3, in spite of the latent ‘fear of China’ of its members, is worth analysing. And in a more modest, though culturally very appealing way, the Community of Portuguese Speaking Countries (CPLP) may stand as another interesting arrangement.

Emerging countries in general also became more aware that *ways of reducing their dependence on advanced economies are worth looking for.*

²⁴ For an earlier view see Flôres (2009).

Concepts like South-South trade and technological co-operation, or stronger cultural links with Arabian and African roots, that a decade ago were almost subject of mockery by the international community, proved of value when the crisis impacts reached trade flows. Though not a panacea, such measures will be more looked for, increasing tension in the traditional western partners.

Before discussing these strategies, one must however ask not only whether the present 'emerging dynamics' is going to be a long-lasting effect, or whether the enhanced positions of most emerging countries are sustainable, but rather whether such dynamics will gradually translate into a more equitable world development pattern and income distribution.

Taking the example of Brazil, the 'new middle class' created after 16 years of macro-economic stability and a continuity of more assertive social policies cannot vanish in the next few years. In spite of the fine moment the country is experiencing, this is by no means certain yet. The same applies to Peru and Colombia, in South America, to the promising African economies and even to such a complex socio-economic experiment that is the insertion of huge fractions of nearly 2 billion people into a capitalist and consumption society in China.

If changes are not stable yet, the brighter look of the southern economies is also partially due to a comparison effect. The relative decline and depressing aspects in the developed economies make investors and analysts alike to turn their views to the emerging markets.

Ways to convert this favourable mood into a permanent achievement depend, ironically and again, on the evolution of the crisis itself. Pursuing the pre-crisis South-South strategies, enhancing the establishment of new markets and the creation of novel channels of production and trade may prove of great help.

Brazil, with the aid of official funds, has been transferring technology to African and Central American countries in order to create an international network of ethanol producers that would form a sustainable global ethanol market. Similar ventures may be done for other commodities and energy goods.

As mentioned before in this section, flexible forms of association, in which neighbourhood is not a pre-requisite anymore, can direct co-operation and joint ventures efforts. With the BRICS at one extreme, as a group the main objective of which, in the near future, is to create opportunities for mutual knowledge and understanding, tapping the ground for common international positions, associations like the ASEAN+3, or the

CPLP community - where synergies can be created by joining countries in three different continents, with an important cultural intersection - can bear more rapid fruits and profit from the good winds.

Unavoidably, this will eventually overflow to the international organisations where the struggle for greater control seems a sure event. Brazil and India – together with, in the “other side”, Germany and Japan – have already clearly stated their intentions as regards a permanent seat in the Security Council. If Africa continues in the positive trend that at least half of its nations are treading, they will also soon demand more participation in international decisions.

If the crisis gave other actors more scope for showing themselves up, it will also – by the logic and mechanisms discussed in section 2 – make some incumbents more adamant to give up their sometimes last share of power. Emerging powers, to take full advantage from the crisis, by asserting their new realities and contributing to changes in the present global order, must be better organised among themselves.

5. Conclusions.

The crisis has drawn attention to the fact that not only emerging powers but other regions of the world as well may be offering different development models and may constitute into alternative, in some dimensions more positive agents, in the conduct of the present stage of globalisation.

Notwithstanding, the traditional western powers have not lost a large amount of control of the world economy. Since the crisis has become less acute, these very powers have sent clear signs that, in what really matters – like key world decision making, or strategic rule-making – they will not concede much, at least, much less than what was at some moment (during the recent peak) expected.

Up to now, no region or group of nations has coined up fully new and innovative answers to the disarray speeded up by the ongoing crisis. No leader, nation or supranational entity has had the courage to either deepen established practices or break with them, in an attempt to produce, one way or another, a bold solution, a new reality. In spite of better perceived and accepted, those different development models and alternatives do not make up either for a comprehensive answer to the present state of

affairs. To carry on is to hesitate at opening doors to the unknown, is to remain trapped in a vortex of vicious circles created by the very system we are in.

And the crisis proceeds, reallocating world power as in a Hobbesian anarchy.

It is difficult to foresee smooth developments in the near future. On the contrary, multilateralism seems to be losing ground to unilateral action or bilateral arrangements. More or less disguised currency wars may lead to serious disequilibria, and turf wars may become more frequent, with motives ranging from securing captive markets to control of specific commodities and energy goods, or targeted regulatory frameworks.

As economic policy becomes even more involved with defence and security affairs, the feedbacks from each side to the other seem likely to keep dissent and animosity high, rather than contributing to peaceful and constructive approaches. A more trouble-prone world may be easily expected. The path seems explosive.

Much work is needed to survive in the coming times.

References

- Angang, H. 2010. *China in 2020: A New Type of Superpower*. Washington D.C.: Brookings Institution Press.
- Büthe, T. and W. Mattli. 2011. *The New Global Rulers: The Privatisation of Regulation in the World Economy*. Princeton and Oxford: Princeton University Press.
- Corsetti, G., P. Pesenti and N. Roubini. 1999. The Asian crisis: an overview of the empirical evidence and policy debate, in P. R. Agenor, M. Miller, D. Vines and A. Weber, eds., *The Asian Financial Crisis: Causes, Contagion and Consequences*. Cambridge, UK: Cambridge University Press.
- Flôres, R. G., Jr. 2010a. Pasando revista al 2009: el año en que murieron las ilusiones, in F. Fàbregues, coord., *Anuario Internacional CIDOB – Centro de Estudios y Documentación Internacionales de Barcelona 2010*. Barcelona: CIDOB Edicions.
- Flôres, R. G., Jr. 2010b. Country Report: Brazil, in H. Hartmann, *managing ed.*, *Managing the Crisis: A Comparative Analysis of Economic Governance in 14 Countries*. Gütersloh: Verlag Bertelsmann Stiftung.
- Flôres, R. G., Jr. 2009. Brazil, the BRIC and the international crisis – A short essay. *BEPA Monthly Brief*, Issue 29, September; 9-11. Brussels: Bureau of European Policy Advisers.
- Haney, P. J. 1994. Decision making during international crises: a reexamination. *International Interactions* 19; 177-91.

- Janis, I. 1972. *Victims of Groupthink: A Psychology Study of Foreign Policy Decisions and Fiascoes*. Boston: Houghton-Mifflin.
- Krugman, P. and R. Wells. 2011. The Busts Keep Getting Bigger: Why? *The New York Times Review of Books*, available at the web, July 14, 2011.
- Macedo, J. B. de. 2010. Global Crisis and National Policy Responses. *Nova School of Business and Economics Working Paper n° 546*, March 2010. Lisbon: Universidade Nova de Lisboa. [also published in *Ética, Crise e Sociedade*]
- Mahbubani, K. 2008. *The New Asian Hemisphere: The Irresistible Shift of Power to the East*. New York: PublicAffairs.
- Posner, R. A, 2009. *A Failure of Capitalism: the Crisis of '08 and the Descent into Depression*. Cambridge, US: Harvard University Press.
- Rajan, R. G. 2010. *Fault Lines: How Hidden Fractures still Threaten the World Economy*. Princeton and Oxford: Princeton University Press.
- Reinhart, C. and K. Rogoff. 2009. *This Time is Different: Eight Centuries of Financial Folly*. Princeton and Oxford: Princeton University Press.
- Schafer, M. and S. Crichlow. 1996. Antecedents of groupthink: a quantitative study. *J. of Conflict Resolution* 40 (3); 415-35.
- Schafer, M. and S. Crichlow. 2002. The process-outcome connection in foreign policy decision making: a quantitative study building on groupthink. *International Studies Quarterly* 46 (1); 45-68.
- Stauffer, D. 1985. *Introduction to Percolation Theory*. London: Taylor and Francis.
- Taleb, N. N. 2007. *The Black Swann: The Impact of the Highly Improbable*. New York: Random House.
- Valencia, M. J. 2010. The South-China Sea: Back to the future. *Global Asia*, 5(4); 8-15.
- Žižek, S. 2009. *First as Tragedy, then as Farce*. London and New York: Verso.

Note

For the “letter to the Queen” in the Prologue, I’ve freely used information in the classic account by the late Sir James C. S. Runciman (Steven Runciman), distinguished polyglot and medievalist, *The Fall of Constantinople 1453*, Cambridge, UK: Cambridge University Press, 1965. The number of scholarly publications dealing partially or entirely with this main event, at the crossroads of a new era, is simply huge. Many encompass histories of the Byzantine or Ottoman Empires, more than a few are outstanding. I personally suggest as a further introduction to the theme, in a broader

panorama, another near classic: Norwich, J. J. 1997. *A Short History of Bizantium*. New York: Vintage Books.

Annex: Conference Report “Interdisciplinary perspectives on the Global Financial Crisis”

1st Pre-Conference with Lisbon Academy of Science (ACL) included in African Development Successes module at NOVA School of Business and Economics (NOVASBE)

May 31, 2011: from 3 p.m to 6 p.m, Sala Maynense, ACL

Panelists: *João Sousa Andrade*, Faculty of Economics, University of Coimbra and ACL.

Renato G. Flôres Jr., Graduate School of Economics, Getulio Vargas Foundation.

Rui Malhó, Faculty of Science, University of Lisbon and ACL.

Rui Vilela Mendes, Center for Mathematics and Applications, University of Lisbon and ACL.

José Luís Cardoso, Institute of Social Sciences, University of Lisbon and ACL.

Discussants from the Community of Portuguese speaking countries (CPLP):

Francisco Mantero, Secretary-General, Business Confederation.

Domingos Simões Pereira, Executive Secretary.

Moderator: *Jorge Braga de Macedo*, CG&G/ NOVASBE, IICT and ACL

The pre-conference focused on the “together alone” paradox revealed by the global crisis: the interaction between globalization and governance is rooted in “group think” within and between countries. Thus several perspectives are needed to overcome the paradox while in the letters of the British Academy to Queen Elizabeth on the crisis, the perspective is solely Anglo-American and in addition neglects the contribution of natural sciences. The perspectives presented and discussed brought together panelists from CPLP and different knowledge areas. It started with a “Narrative of the crisis: from dollar to euro zone” presented by João Sousa Andrade, including examples of different types of crisis together with a perspective on the evolution of faith in market economies as generators of never-ending prosperity: the crash of Wall Street (1987), the failure of Saving and Loans Associations (1989-91), the Japanese crash of stocks and housing prices (1990), the European Monetary Crisis (1992-3); the Mexican debt crisis (1994-5), the Asian monetary crisis (1997-8), the Russian debt crisis and the insolvency of LTCM (1998), the dotcom crisis (2000-1) and the Argentina crisis (2001-2). The existence of a high level of systemic risk was recognized with the emergence of the

2007-8 financial crisis. Nevertheless during some months in Europe the concern with inflation was stronger than the recognition of a sovereign debt crisis in the eurozone. It was not until late 2009 that the fear of Greece's default arose.

After this perspective about beliefs in market economies Renato G. Flôres talked about "Consequences of the crisis for emerging markets: a world redistribution of economic power?". He addressed the question of economic power redistribution between emerging markets and the so called developed markets, as the financial crisis resulted in a shift in wealth from the developed to emerging markets. One question that he raised is whether this is a long-lasting effect or instead if it translates into a world redistribution of economic power to emerging markets. By adding that behind economic power lies power itself, for example as embodied in military and offensive capabilities, the author enlarged a strictly economic perspective combining it with basic geo-political considerations. His approach changes the way we look at (and forecast) the consequences of the crisis. Emerging powers may profit from the crisis, by asserting their new realities and contributing to changes in the present global order. But for this mutual knowledge, as advocated by the 2006 Bissau declaration on Millennium Development Goals in CPLP, is essential. To be consistent he suggested CPLP is more a combination of ASEAN and BRICS than anything involving advanced integration experiences such as EU, Mercosul, ECOWAS or SADC.

Rui Malhó, the third panelist, presented a perspective about economic crisis that links biology concepts with economics. He thought of the economy as complex systems in the same way that we can think of cells, or of the nervous system. In living organisms, a signal may trigger responses whose intensity and dispersion depend on the initial stimulus and on the local environment where it is perceived. Similarly a regional conflict may or may not have influence on a global scale. He quoted references illustrating this view (e.g., *The Second World* by Parag Khanna). After this biological perspective, Rui Vilela Mendes presented a perspective from mathematics of finance. He pointed out that mathematical models were blamed for the subprime collapse and the subsequent global crisis. However he argued that the advance warnings had been there, but that nobody had paid attention. He justified this lack of attention with the overriding concern with short term profits and suggested guidelines for future behavior by both economists and mathematicians. For the former he advised that regulation should not only implement safety measures but also avoid conflicts of interest and procyclical effects and for the latter that economic mathematics went beyond stochastic analysis.

José Luís Cardoso provided an historical perspective, illustrating with a few examples the significance of new subject-matters to understand the development of distinct ways of both economic inquiry and policy advice. The current global economic crisis reveals different strategies used by economists to adapt their vision and proposals on the functioning of economic life. Facing the current economic situation many economists are forced to admit that they were blind or wrong in their earlier diagnosis and predictions. They also make considerable efforts to keep their reputation intact by supporting arguments favorable to the flexible nature of economic ideas. Quoting Paul Krugman, John Maynard Keynes and Lionel Robbins, he described the return to Keynes heard in current debates about the changing nature of economics. He gave special attention to the varying discourses and practices of economists and how they relate to changes associated to the occurrence of unexpected economic and financial events

After the discussion between panelist and with the students, the discussants presented some insights about the role of CPLP. Francisco Mantero started to discuss the importance of CPLP success to other countries. For example, this success can facilitate investments and promote joint ventures with financial institutions partners. He emphasizes the success of Guinea-Bissau in the HIPC initiative and in the execution of a structural economic program and referred to it as an example that Portugal should follow. The importance of increased trade between CPLP countries is also advocated, in addition to the emphasis on the MDGs. Domingos Simões Pereira pointed out the difficulty in addressing problems that are specific to each country. An important question still not answered is “What’s a crisis in Africa?”. In order to start answering this question he argues that we need to understand what are the strategic projects most appropriate for each country. Answering the question of How the sharing of knowledge is viewed by CPLP, he emphasized learning to use human resources rather than only think about exploring physical resources.

Graça Silva 24 June, 2011

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