Beyond the veil of the financial crisis
The butterfly theorem or how to reconstruct out of a genuine New "New Deal" a stable long-run true growth.

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This paper is the revised and extended version of a conference at the James Galbraith seminar held at the Lyndon B Johnson school of social studies, university of Texas at Austin on september 11 2008. I have to thank all the participants for their comments and I owe much to following discussions with Olivier Giovannoni and Daniel Pichoud. As I emphasized before, it is to be read as part of a General Theory of the modern capitalist economy, and thereby as its model. From this general model one may derivate many little formalized models if and only if they are required to bring about robust true empirical studies deprived of excruciating ad hoc assumptions.

In guise of introduction : the butterfly principle

In Parguez 2009 (a,b) I explained why the core base of the modern capitalist economy is the monetary circuit process entirely relying on the leading role of the State through its fiscal policy.
In this contribution I intend to address the fundamental consequences of this process for the explanation of the so-called 2008 financial crisis.
In a first part I shall derive from this process the stability conditions of the real economy which are also the existence conditions of a long-run growth path.
In a second part, it will be proven that for some time those conditions had been violated by an accumulation of disastrous policy choices by States turned to predators.
Herein lies the sole explanation of the financial crisis which is nothing but the veil of a structural or systemic crisis, the second one, the first being the 1929 one. In normal circumstances a minor shock like the sub-prime affair would have been without a deep impact, but, in a fully destabilized real economy, it played the role of the butterfly effect of chaos theory. The landing of the butterfly generated an earthquake in Wall Street.
Thereby in a third part I shall strive to describe what must be the sole sensible agenda to bail the economy out of the systemic crisis. It goes far beyond the salvation of the financial system by State injection of money and "morality" imposed on traders. It is much more than a mere short-run fight against a pure recession. Even in the USA, the recession could be over but the crisis it has revealed could just be starting. I shall prove that what is required is to reconstruct the infrastructure of a new long-run growth path meeting more the stability conditions than the previous one that was destroyed by the predator State. The Agenda is rooted into a long-run planned deficits commitment of which the counterpart is the planned growth of public investments creating tangible and non tangible real wealth.

Part I The stability conditions of a long-run stable growth.

From the analysis of the dynamic monetary process, one may derive the set of stability conditions. As it will be explained, all ultimately depend on a long-run fiscal policy targeting high-enough planned deficits. I think of five intertwined conditions which must be simultaneously attained:

1/ A genuine full-employment excluding all kinds of involuntary under-employment. It is the golden path to a sustainable price-stability implying the inexistence of true inflation.

2/ A stable and high enough labour share in macro-economic distribution implying a sustainable and moderate inequality in income distribution.

3/ A stable banking system which requires that there is a long-run stable growth of State debts to which the growth of private debts is to be adjusted.

4/ Pure monetary policy is to be adjusted to long-run fiscal policy 3 and 4 together must ensure low enough and stable rates of interest and prevent banks to thrive on loans which do not instantaneously materialize into productive expenditures.

5/ At last, taking care of the foreign sector, the State must always spend in its own currency and public investment generated by planned deficits must in the long-run allow a sustainable trade deficit. 5 means that in an economy well-managed by planned deficits there cannot be a

true foreign constraint. It implies that the State must not target (or rather enslave itself to) a fixed exchange rate.

I-1 *The full –employment priority target*

One need first an accurate definition of what is true full-employment: it exists when all those needing to work to attain the socially normal (providing no exclusion from the dominant standard of life) long-run consumption expectations, are able to get a job providing them with enough income either from the private sector under normal conditions (out of its profits long-run expectations) or from the State (all levels together). Full-employment must thereby be defined relative to the socially exogeneous long-run household expectations which change over-time from a very long-run perspective. Its existence condition is ultimately the absence of income rationing for those able and willing to work.
From this definition stems the genuine definition of true unemployment which includes all cases of disguised unemployment taking care of existing forced under-employment. It should be obvious that true or effective unemployment is involontary since it implies rationing and failure to meet the long-run consumption expectations.

I-1.1 Let us first look at the determinants of effective employment in the private sector firms. In any accounting circuit period taking care of the exogeneous long-run consumption expectations, there must be a unique amount of effective labour income W^0 meeting them, such that:

If:
W^0 Labour income
L^0 Required quantity of labour in labour units(taking care of the socially accepted working time)
w^0 Income in money units per unit of labour to get the normal basket of consumption goods

Then:

$$W^0 \equiv L^0.w^0 \qquad (1)$$

Identity (1) needs three comments to get rid of false interpretations:

-W^0 is rising over time as more items are included into the targeted basket of consumption goods and more household desire to get an autonomous income whatever the precise motive.

-There is a unique combination of L^0 and w^0 providing non-rationing. It means that there is no trade –off from the perspective of income-seekers between L^0 and w^0. In other words to each W^0 there is a unique set of L^0 and $w^{0.}$

-At last, income seekers determine w^0 in terms of its purchasing power on the targeted basket of consumption goods. It means that w^0 is fixed taking care of expected inflation which implies that contrary to some widespread interpretations inherited from "bastard Keynesianism" and the "Philipps Curve" (which is fully part of it), income –seekers are free from any kind of monetary illusion. They fix w^0 because relying on what they may know of pricing behaviour they bet that it must provide them with the desired real wage in terms on consumption goods.

Identity (1) means finally that in the given accounting period, W^0 is the value of the existing labour force.

I-1.2 On the other side from again a macro-economic perspective, let W be the labour income firms want to pay and are to pay assuming that their expectations are endorsed by the banking system . W meets identity (2):

$$W \equiv L.\, w \qquad (2)$$

Where L is the effective quantity of labour employed and w the effective income paid for an average unit of labour. (2) has three characteristics:

-First, W may vary over time, rise or fall only depending on firms expectations.

-For each W there is a unique combination of L and w meeting firms expectations. It means that from firms bets on the future perspective there is no trade –off between L and w.

-No more than income-seekers, firms suffer from "monetary illusion". Through the fixation of the wage in money units, they target the real wage fitting their pricing plans taking care of the average labour productivity. Such a rule reflects Eisner proposition that firms long-run expectations embody their given production function (Eisner 1960)

We get thereby the employment function in each accounting period t

$\prod_t^l$ long-run expected flow of profit or "permanent flow of profit"
r* long –run targeted rate of profit
W_t Wage bill

$$W_t = \frac{1}{r^*} \prod_t^l \qquad (3)$$

It relies on two fundamental motives and it seems to be supported by ongoing empirical research:

- First, firms must adjust their effective employment to their given permanent profits flow. W_t is the value of labour which according to firms bets embodying their production function, must provide them with the aggregate amount of output generating enough sales to reach the level of profits fitting the permanent flow. It has already been proven (Bliek and Parguez 2007) that $\prod_t^l$ is an endogeneous variable depending directly and indirectly on planned State deficits (the anchor-effect). It means that a rise in realized profits which is not looked as a consequence of an increase in planned deficits has no impact on employment. It just leads to a rise in the effective share of profit above its long-run term required level. Such an effect explains why pure automatic anti-cyclical fiscal policy (the so-called automatic stabilizers) has no impact. Firms endowed with the minimum degree of rationality are to expect the future fiscal surplus out of an automatic increase in taxation and an equally automatic

increase in expenditures. This anti-stabilizers theorem generalizes Eisner (1960) proposition that a rise in profits generated by an increase in sales looked as "accidental" has no impact on investment.

- Second (2) emphasizes the crucial role of the employment multiplier 1/r* to be substituted for the old Keynesian multiplier. It reflects the ability of firms' managers to react to the threat of absolute uncertainty or rather unknowability of the far future taking care of their creditors own fear of what could happen. Even if firms and banks managers are ready to believe that for the very long-run the State is committed to a growth of planned deficits they cannot ignore what could or rather must happen in the short-run. They are obliged to bet on short-run "shocks" embodied into sudden and sharp reversals in fiscal policy. Thereby rational managers are obliged to strive to protect themselves from those shocks which must induce sharp losses in the capital value of firms and banks. In the most straightforward way their problem is:

  By how much raise employment when we may rationally bet on an increase in the permanent profits flow?

  Their answer must be:

  The more we fear a future downwards shock in fiscal policy the more we must be cautious in our employment response, the lower is to be the employment multiplier.

The 1/r* factor must be interpreted as a structural factor of the monetary capitalist economy, a long-run insurance policy against fiscal policy shocks. Its twin is what must be deemed the long-run required share of profits m*. Assuming for the sake of simplicity that the share of net rentier or interest income in the aggregate private sector net of taxes is an exogeneous policy parameter controlled by fiscal and monetary policy, m* being the share of expected long –run profits to the aggregate private income net of interest fitting firms long-run expectations, we get with:

m* long-run required share of profits
Y firms long-run expectations of output

$$m^* = \frac{\Pi_t^l}{Y} = \frac{r^*}{1+r^*} \qquad (4)$$

(3) and (4) may stir the echo of Kalecki theory on income and employment. What the theory of the monetary circuit has borrowed to Kalecki is the fundamental duality of the profits variable. They differ in the interpretation of the distribution parameters r* and m*. In the generalized circuit approach both are not just explained by the non-existence of perfect competition, the mark-up pricing theory illustrating the "degree of monopoly" which unveils a reference to the perfect competitiveness model as some relevant state. They are only explained by the capacity of capitalists (producers and bankers) to impose on income-seekers their search for insurance against shocks in the contest of absolute unknowability of the

future. Thereby as it will be proven contrary to Kalecki both can be ultimately controlled by the State

I 1.3 –Finally the employment function relying on the (r* m*) multiplier fits some ongoing research (Giovannoni 2008 b). Being very-long –run variables it is perfectly sensible that effective levels of r and m fluctuate around their required level. As already explained any increase in the State deficit which is not registered as a change in the planned deficit, generates a rise in the share of profit above its required or long-run level. Inversely a drop in the State deficit which is registered as a pure shock generates a fall in the share of profits below its long-run level. It could explain why looking at the USA data the distribution factor fluctuates pro-cyclically around its rather stable long-term level.

I 1.4 From the employment function stems an obvious conclusion: there is not the least reason why the private employers let alone could generate full-employment. The normal case of any monetary capitalist economy is unvolontary unemployment because income-seekers own long-run expectations determining the long-run growth of W^0 do not have the least autonomous impact on the determinants of W_t. Usually W_t over time is to be lower than W^0 because of the profits motives constraint.:

- The permanent flow of profits is too low over time because of the non-existence of planned State deficits or just because they are not growing at the required rate.

- The employment multiplier is too low (the required share of profits too high)

Both constraints prevent the existence of the dynamic process initiated by household increase in debt what could be deemed the generalized dynamic accelerator process: household new debt resulting from their given long-run expectations cannot generate the future growth of their income that could pay for their past debt.

II 1.5 Full-employment must be a priority target of fiscal policy for two intertwined reasons:

A/ Beyond pure moral and social justice motives (including the very legitimacy of the political power) it is a deep source of economic waste and instability. Beyond, may be, some minimum threshold, unemployment becomes self-increasing. There cannot be a situation that could be deemed "unemployment or under-employment equilibrum". The explanation is straightforward:
Its origin lies in the increasing incapacity of firms and banks managers to fight uncertainty worsened by the non-existence of an anchor effect. Thereby there must be a widespread desire of the private sector managers of an increasing share of profits which materializes in a decrease in the wage in money units. It generates a drop in consumption (and thereby in investment) leading to more wage cuts and more unemployment.

B/ Contrary to old conventional mainstream belief inherited from the Phillips statistical curve transmogrified into a law there is not the least alternative in a modern economy between true full-employment and true inflation. In an economy directly driven mainly by consumption a sensible definition of inflation is a long-run fall in the purchasing power of labour income because of the non-compensated increase in the prices of the basket of consumption goods fitting holders of labour force long-run expectations. It is tantamount to the depreciation of labour and thereby a continuous fall in the amount of value or rather anchor-value generated by the creation of money. It means that contrary to the weird interpretation of inflation as a

tax levied on money holders (it is the famous seigneurage which could exist in old despotic or restored ones economies) inflation is an increase in labour exploitation levied by the capitalist class, firms and banks alike. This inflation exploitation can indeed be reinforced or generated by the State when it turns Predator by over-taxing prices of consumption goods or increasing the monopoly price of its own services.
To make sense of this definition germane to any capitalist economy, let us start by defining under very simple assumptions, the pricing process of consumption goods. As explained in the monetary circuit literature, prices enter the system in each accounting circuit period as key variables of the spending plans of firms. It does not mean that prices are frozen; they are determined simultaneously with quantities; they may change overtime but they are not pure "market prices" since they must be fixed by producers and only by them. They are a key part of firms own planning as John K Galbraith discovered a long time ago in his New Industrial State (1967)

If:
L aggregate employed labour in labour units
k the share of labour in the production of consumption goods
a average labour productivity
b_k the share of interest paid by firms in the consumption goods sector
R aggregate losses in this sector resulting from under-utilization of equipment
Z_k aggregate raw material costs in this sector
J_k capital losses per unit of output
z_k capital losses per unit of output
jk raw material cost per units of output
g^* cost of State services charged on household
r_k* the required rate of profit
p^*_k the average price of private consumption goods
P_k* the inflation index.
w being as always the money paid for an average wage unit
For the sake of simplicity there is no mention of the time index t.

In each accounting period the inflation index is:

$P_k^* = g^* + p^*_k$, where g* is exogeneously given since it enshrines the monopoly power of the State on its services

$$p^*_k \; k\,L = w\,a\,k\,L\,(1+r^*)\;(1+b_k R) + J^*_k - Z^*_k \qquad (5)$$

$$p_k^* = \frac{w}{a}(1+r^*)\;(1+b_k R) + \frac{J^*_k}{akL} + \frac{Z^*_k}{akL} \qquad (6)$$

$$p^*_k = \frac{w}{a}(1+r^*)\;(1+b_k R) + j^*_k + z^*_k \qquad (7)$$

In this system one may assume that the required rate of profit r* is the same in all sectors. Since it applies to net profits, it already takes care of taxes on profits and financial amortization of past investment in terms of acquisition of equipment goods sold by the equipment goods sector. Taxes on consumption goods sales are included into the g* component of the inflation index. Because of the accelerator-led investment function we may

assume that k is a constant while a, the same in all sectors, is in the long-run rising with public investment in technology, research, education and health.
From these very sensible assumptions one may derive the following characteristics of the inflation process:

- The more the State promotes full-employment out of long-run planned deficits policy, the more a is rising, r* is falling because of more optimistic expectations , $b_k R$ drops thanks to a continuous drop in interest rates and lower accumulation of net debts by firms in all sectors where sound household debt are substituted for firms debt. At last the more the economy converges on full-employment the more consumption-goods firms (like investment goods one depending on them) escape from losses caused by under-utilization of equipment.
- Since a full-employment policy requires planned deficits it imposes either a drop or at least a stability of the g* component.
- Contrary to the core postulate underlying the Phillips curve-led alternative and its progeny (the NAIRU the natural rate of unemployment) the more the economy is close to genuine full-employment the more the so-called wage-led inflation disappears. It would contradict the long-run expectations of labour-force holders. They are free of the weird disease of "monetary illusion" invented by neo-classical economists interpreting Keynes and endorsed by most of the neo-marxist school especially their regulationist branch (Bliek and Parguez 2007). They do not have the least motive to impose increase in the wage in monetary units, their consumption expectations being met, that would impose a collapse of their standard of living.

There remains a last factor the exogeneous rise in raw materials entering the production of consumption goods (energy, basic components of food prices, etc.). In the long run it cannot be controlled by a rise in unemployment. It must be compensated by specific long-run government policies which are part of the planned deficit strategy (development of new sources of energy for instance).

We are therefore led to the following conclusions:

A/ The sole way of promoting <u>true</u> price stability is to promote true full-employment

B/ There is not the least paradox in the so-called stagflation era which started in the seventies in USA and afflicted Europe, France for instance from 1976 onwards (Parguez, Bliek 2007, Parguez 2008). Stagflation is the normal or spontaneous situation of a capitalist economy when the State abandoned its anchor role. It is a paradox for those who ignore the genuine pricing process of modern economies. Wage-inflation leading to a profits squeeze never truly existed in economies close to full-employment. It would postulate fully irrational and self-destroying behaviour from income-seekers (organized or not).
These propositions sustain the existence of a positively sloped Phillips curve which according to ongoing empirical research (Giovannoni 2009) could fit the USA case. It should allow economic research once for all to dismiss the very notion of a NAIRU or a natural rate of unemployment à la Phelps, "the greatest misconception of all" (Eisner 1994 p 69)

C/ What must be done is the systematic very long-run intervention of the State both in the private economy and in its own sector.

C1/ In the private sector through a very long run commitment to planned deficits embodied into specific programs responding to the existing and foreseen needs of society, the State may control the determinants of the employment function in its two pillars:

- It may generate a strong growth of the permanent flow of expected profits.

- It may induce a declining required share of profit, an increasing employment multiplier. By providing all firms with the certainty of an accelerated delivery of net profits, the State leads firms and banks managers to always dare to answer positively to household new debt. Ultimately the desire for insurance against shocks could fall to a minimum (r°, m°) ensuring a perfect coordination of firms, banks, and job-seekers long-run expectations.

As already mentioned the real or material twin of those increased planned deficits embodies daring bets on the future of Society. In some way through the creation of money by its expenditures the State may invent (or strive to invent) the future. Herein lies what mus be deemed the dynamic planning system experimented only in the USA and never in the European monetary union (Europa).

Old planning	Dynamic planning
1 The private sector either does not exist or is controlled by the State	1 The private sector plays the crucial Role and behaves independently
2 The employment function plays no part	2 The State strives to have a positive impact on the determinants of the employment function
3 Consumption is squeezed and plays no part in the growth process	3 The growth of public investment does not require a squeeze of consumption
4 The accelerator –led accumulation function does not exist	4 Consumption is the ultimate direct engine of growth
5 The State planners pretend to know the future	5 The accelerator-led investment function rules. One could even think of a generalized accelerator in the employment function
6 State investment leads growth but does not entail audacious bets	6 The State or rather public investments are the anchor; they entail audacious bets to invent the future
7 Ultimate failure and shock therapy	7 No shock –therapy to end the dynamic planning

C2/ In its own producing sphere, the State generates employment in terms of the State permanent employees (or civil servants). The long-run growth of public investment requires more job creation. No dynamic State targeting full employment will indulge into policies targeting the long run disappearing of public employment in the like of the Sarkozy "New-deal" in France from 2008 onwards. There could be more: the State (all levels) could implement direct program of job creation outside the normal public service. It is the core of the ELR (employer of last resort) programs promoted by Mosler (1995,1998), Tchernova (2008) and Wray (1998). Those programs are to be included into public investment at large and thereby included into the planned deficits. Contrary to the State subsidized jobs in the private sector, the ELR program does not contradict the fundamental law of value.

I.2 *The distribution factor policy is the twin of a true full-employment policy*

I 2.1 It has already been explained why a low and stable share of profit is a sine qua non condition of the success of a full employment policy. For a given planned growth of public investment through planned deficits, there could be as mentioned a minimum required level of the share of profits m° fitting the perfect adjustment of expectations.
It means that in a dynamic monetary economy directly led by consumption there must be the following cumulative process:

A rise in m* (or r*) automatically generates a rise in unemployment because firms no more endorse income –seekers bets on future consumption ; the rise in unemployment generates a drop in consumption ; through its cumulative impact (accelerator) it generates a drop in the permanent profits flow ; which could increase the threat of uncertainty and raises more m*.

I 2.2 According to an empirical study of Giovannoni (2008 b) looking at the data from OECD countries for a long period there has been an extreme divergence in the evolution of distribution (the m* factor) fitting the cumulative process just described.

A/ In the USA from 1954 to the end of the nineties of the past century the long-run m* was remarkably stable. It started to rise after 2001 under the Bush years predator State. In the euro-zone from 1983 onwards the share of profit never stopped to rise especially in France and Germany. Even in the USA, the rise in recent years has been much more modest than in the Euro-core for such a long time.
As predicted by the theory from 1983 onwards effective unemployment never stopped to increase at an accelerated pace while in the USA unemployment only started to grow in the recent years pari-passu with the change in macro-economic distribution.

B/ How can we explain such a divergence but by deep differences in macro-economic policy relative to distribution:

> In the USA the extraordinary stability for a very long time of the share or profits can be interpreted in terms of a stable and low m* reflecting the high confidence in the future of industry and banks managers maintaining a very high employment multiplier sustaining the dynamic indebtness process of consumers and thereby the accelerator investment function of Eisner. The State contributed to this stable distribution through the constant growth of its expenditures. It is true that during that period government deficits were not increasing in the long run and it is not even sure that when they occurred they were <u>always</u> planned. At least all private long run expectations makers were certain that the

government will accept deficits when they were required to compensate for short run shocks in private expenditures (drop in consumption leading to a drop in investment or drop in investment following over optimistic bets on consumption as deviations from the long run accelerator functions). There was one exception to this anchor effect sustaining consumption expectations, the stagflation era from the late sixties to 1983. It was a time perfectly fitting the positively slopped Phillips Curve. Inflation started to accelerate as unemployment started to grow. A sensible interpretation rooted into Eisner (1994) is that the government lost its role of anchor and decided to fight an inflation caused by exogeneous price shocks and capital losses out of under utilization of equipment by a restraint on expenditures and higher taxation. The share of profits started to fall not because of profits squeeze by excess wage hikes but as the outcome of a much slower growth of consumption and State expenditures which vindicated the generalized accelerator function by the induced decline in expected profits.

C/ Contrary to the USA since the mid seventies but mainly since 1983 there has been in the Euro –core, Germany, Italy, France a long run policy targeting explicitly the increase in the long run share of profit (and thereby a collapse in the share of labour taking care of all social benefits).
As shown by Giovannoni charts (2008 b) in the whole Euro-core the share of profits rose rather at the same pace. What is more remarkable is that it started at level quite below the USA level and in the long run converged towards the USA level.
Such a stunning divergence relative to the American case is raising three questions of the upmost importance for the forthcoming explanation of the 2008 crisis.

1/ Does it contribute to explain the accelerated increase in effective unemployment in the Euro-core and especially in France? The answer is yes without any doubt. It is a perfect empirical vindication of the employment function.

2/How could we explain such a policy and how was it implemented?
Looking at the macro economic models used by the French ministry of finance is highly instructive. They relied on two postulates mixing some neo Ricardian theory of distribution and some neo classical reference to a permanent or potential income accounted into a state of full rise of factors capacity:

- Accumulation was the sole engine of growth; consumption played just a pure passive role. Investment function used by planners rejected the Eisner accelerator. Investment only depended in a dynamic economy on the expected growth of aggregate profits which itself reflected the growth of past profits.
- In any accounting period to raise aggregate profits it was enough to force an increase in the share of profits since the "significant income" was given. Thereby ultimately to get a super dynamic growth (the exhilarationist regime) it was enough to squeeze more and more labour.

What was required to implement this forced increasing labour exploitation policy was just to force an accelerate decrease of the growth of the real wage until it became negative relative to the growth of productivity which itself reflected partly the impact of more authoritarian labour conditions. Because of the concern with price stability the success of this policy depended upon the downwards adjustment of wages in money units relative to productivity. It could only be achieved by a long run State fiscal and monetary policy targeting the rise in unemployment out of a squeeze today of aggregate demand the core

of 1983 shock –therapy in France (Bliek and Parguez 2006), the true Attali plan. Euro shock-therapy plans triggered a cumulative process of stagflation :

-The initial shock raised so much unemployment that downwards wage adjustment allowed the targeted rise in the share of profits which generated more unemployment initiating higher share of profits determining more unemployment. Expected long run profits could not rise in such a self –destroying environment. Decreasing growth imposed un-wanted government deficits which had not the least positive impact on expectations; herein lies the perfect example of what must be deemed "bad deficits". These deficits just raised the share of profits above its long run rising path. Meanwhile inflation did not vanish at all. The drop in labour costs could not compensate the continuous rise in the r* factor in interest costs and in capacity utilization.

-It is thereby obvious that a policy of increasing the share of profits destroys the anchor-role of the State, it leads to a depreciation of the value of labour that creates an environment of obsessing fear of the future which explains why in the USA private managers own required share of profits started to diverge from its long run stable level in the very late nineties or early twenty first century. Its outcome was an increase in unemployment followed later by a renewal of inflation: the positive sloped Phillips curve is again vindicated. Contrary to what happened in the Euro-core it was not the outcome of an explicit State policy choice. It could be explained by an increasing uncertainty about the future relative to shocks in the production sphere. The twin of the rise in the desired share of profits was the flight from production of real value to pure speculative finance which seemed free from any shock!

3/ There remains a last question raised by the convergence. Why ultimately does the same distribution reflects such an enormous difference in effective unemployment between the Euro-core and USA illustrated in Giovannoni (2008 b)? The answer lies in the very process of convergence imposed by policy choices. It generated more and more pessimistic expectations in Europe relative to the USA. The desire to be protected against the increasing threat of policy shocks became more demanding in Europe, which let firms to thrive in Europe on a long run collapse of the employment multiplier.

I.3 *The sine qua non of a long run stable growth attaining true full employment and thereby the required distribution is a perfectly stable banking system.* It is maintained when banks are always endorsing private expectations leading to the creation of true real net wealth (its anchor being the growth of the labour –value) without believing that they are obliged to impose rationing on private spenders.
The existence condition of this long run "financial stability" is that the stock of private assets held by banks and other private institutions acting as pure intermediaries (pensions funds, insurance companies, investment banks etc) must always be adjusted to the long run growth of government debt. True "financial stability" requires that the long run rate of growth of public debt is the very one generated by the required rate of growth of planned deficits reflecting public investment in the broadest sense; it must be deemed the "financial stability law".

I.3.1 Debt titles issued by the government are for banks and all financial intermediaries the most secure asset. It is exactly the equivalent of cash in State-issued money providing a fixed income decreed by the treasury. The State can no more default on its debt instruments than on its cash directly issued by its banking department the central bank. The market value of

treasury debts title is absolutely independent from speculation thriving on fragile bets on the future. It is true that fluctuations in the rate of interest charged by the central bank may generate inverse fluctuations in the value of public debt titles because of its impact on the expected long run rate of interest. As shown by a converging set of empirical studies especially Giovannoni (2008 c) the central bank own rate being a pure exogeneous policy variable, it means that central bank monetary policy ultimately controlled the market value of public debt titles. The financial law stability requires thereby a perfect coordination between the planned deficit policy and monetary policy. The central bank has to target, as it will be shown, low and overall stable long run interest ratio. Even if this coordination is not perfect the value of private banks assets generated by private debts is much more instable than the value of treasury debts.
Private debtors, firms and household alike may default because of over optimistic bets on can unknowable future. Failure of private expectations may lead to a collapse of their market value inducing in banks balance –sheet losses which could become unsustainable. Even if banks losses are compensated by the provision of State money whatever the mechanism banks can be led to stringent rationing of private debtors (the so-called credit crunch)

I.3.2 Herein lies the ultimate reason why there cannot be a trade –off between public debt and private debt to attain full-employment stable growth.

There would be a trade-off if the growth of private net debt could be substituted for public debt in banks balance-sheet without increasing financial instability. It would mean that banks net creation of money for household is substituted for planned deficits as the anchor of full employment growth. The growth of household net debt should be henceforth the source of both the required growth of the permanent profits flow (accelerator effect) and high enough an employment multiplier.
This fall of the ratio of public debt to private debt generates thereby a drop in the private sector net saving which turns into an aggregate net deficit. Banks assets value is more and more fragile because it only depends on firms expectations of the solvency of their debtors which rooted into their bets on the future rise in the value of the collateral of the loans (houses prices). Those bets are anchored in nothing, they are purely speculative. As soon as there is the start of a reversal of expectations because of some shock (some debtors cannot meet their commitments) the whole pyramid of banks assets can be deprived of value. The depreciation process is accelerated if there is suddenly a reversal of the speculation of the collateral value for reason of a new shock.
As banks assets value collapses, fearing suddenly the possibility that their own creditors ask instantaneous repayment in hard liquidity (in our example it must be firms which invested a share of their net profits in banks interest bearing deposits) banks are induced both to stop new credit and ask their debtors to repay at once their past debt.
The economy is henceforth close to cumulative negative process as consumption collapses and thereby private investments, while the induced rise in unemployment is reinforced by a drop in the employment multiplier (a rise in the required share of profits).

I.3.3 The proof of the law should be final[1]:

[1] Herein is the reason why the emphasis put on banks "own funds or capital" is meaningless. It is only sensible if it means an accelerated forced rise in interest rates (including fees) imposed on private debtors. The financial stability law perfectly meets the empirical study of Baragar and Seccareccia 2008.

For an economy there is a long run ratio of public debt to private debts granting financial stability. It does not mean that this ratio is fixed for ever! Let us assume for instance a speculative boom in the value of stocks generated by a sudden shock (like the new technology boom in the late nineties or the house boom in the early twenty first century). There should be at once an increase in the rate of growth of public debt (higher planned deficits) to protect the stability of the whole financial structure (the so-called financial markets).
Former and still existing advocates of the public debt burden cannot understand the fundamental financial stability law in none of its twin components:

- In the long run there must be a constant growth of the stock of public debt, the pure anchor effect to which the stock of private debts is to be adjusted (or its counterpart the stock of private assets generated by private indebtness). It cannot be the same for all economies.
- In the short run a shock –induced speculative boom must lead to an increase in the growth rate of public debt above its long run component.

What underlies the law is that the growth of the public debt as long as it is itself anchored into productive and socially required public capital formation is the most perfect intergenerational transfer of wealth as it has already been explained.
Let us recall the multi aspects of this gift from the present to the future compared to the genuine burden initiated by a growth process entirely or mainly driven by net private debt.

Growth process Anchored into planned deficits	**Growth process not anchored into planned deficits**
1- Permanent creation of a net surplus or saving fund for the private sector	1 No creation of a private net saving fund. Lack of net desired savings
2-Backed by the most secure assets as State money earning interest transferred to future holders	2 Money creation is not backed by secure assets. It cannot lead to the creation of assets endowed with a true stable real value
3-Their collateral is the execution is the creation of real capital endowed with a true value independent of speculation shocks. Its own anchored by the growth of labour value fitting labour force holders expectations	3-The collateral of debts is not thereby the long run endowment of future generation with productive and socially useful capital The value of capital assets is always submitted to speculative shocks.

4-A monetary circuit initiated by State money creation provides financial stability for the future	4-No financial stability granted
5-Ultimately all expectations perfectly converge	5- Expectations cannot converge
6-Finally the growth of public debt maintains the ratio of public debt to private debt stabilizing distribution by enforcing the employment multiplier meeting full employment	6-The failure of coordination leads to unsustainable low employment multiplier (too high desired share of profits)
7-No stagflation is possible	7-Stagflation rules

I.4 *The fundamental financial stability law has a corollary* : the full support of fiscal policy by monetary policy playing what must be deemed its ancillary role

I 4.1 Banks assets must only be initiated by loans instantaneously leading to true real wealth creation whether consumption or through the Eisner –Giovannoni accelerator (Giovannoni 2008a) net new capital equipment. Such a condition perfectly fits the intermediary role of banks when they recycle a share of net private saving fund into non-banks intermediaries like insurance corporations or pensions funds or even the direct acquisition of equity sold by firms. What should be forbidden by regulations monitored by the central bank are two kinds of escape from stability requirements:

- Banks should be forbidden to create money which does not or rather cannot materialize in productive real wealth creating expenditures. Loans to pure speculators thriving on derivatives must be outside the normal role of banks
- Banks must always remain secured against speculation losses by being obliged to hold a share of their assets in State debt. Substituting the requirement of own capital for liquidity in terms of last resort money is the path to disaster. The explanation is obvious: what could be the "capital base" of banks? Either it is State debt (we are back to the traditional reserve requirement) or funds arising from the accumulated net interest income on the sale of stocks to private investors. As long as net income is provided by private debtors it is not secure at all and the value of stocks acquired by private investors (out of loans from other banks) is deprived of any stable real value, it only depends on speculative bets on the future.

Those two conditions <u>together</u> does not mean that this generalization of the theory of the monetary circuit restores the old exogeneous theory of money. It could be true that the central bank is ready to provide liquidity to banks close to bankruptcy. It does not hide the fact that those banks failed, have to pay a cost and will be tempted by more rationing of credit. <u>In any case, money is always by its very definition endogeneous but thanks to the State leading role in the process of money creation</u>.

In a stable economy which does not thrive on creating the conditions of a financial crisis banks money creation is rooted into a leverage effect on the provision at zero cost of State money through planned deficits.

I 4.2 Monetary policy implemented by the Central Bank (at least partly) must strive to maintain stable and low enough interest rates especially for household. Such a policy requires the full cooperation with the treasury that can fix interest rates on the public debt which is always on short supply relative to demand. It means that it is wrong that the Treasury has to rise interest rates to obey to "market forces"[2]

I.5 *The final stability condition is that in an open economy with a non neutral foreign sector E, the State only spends in its own currency and thereby only issue debts denominated in this very currency units.*
From this condition stems the perfect generalization of stability conditions I.1 to I.4 to the open economy.

I.5.1 The fundamental accounting identity (Parguez 2009 a b) must henceforth integrate the foreign sector net surplus or new savings S'_E reflecting the trade deficit, thereby
If:
D_G State deficit
S'_P Domestic net new savings
S'_F Firms new net savings or net profits
S'_H Household new net savings
Π Gross profits
I Firms new investments
S'_B Banks net profits

In each accounting period the following system of identities always holds[3]

$$D_G \equiv S'_P + S'_E \qquad (8)$$

With as always

$$S'_P \equiv S'_F + S'_H + S'_B \qquad (9)$$

$$S'_F \equiv \Pi - I \qquad (10)$$

$$\Pi \equiv D_G + I - (S'_H + S'_B) - S'_E \qquad (11)$$

with $S'_H > 0$ $S'_H = 0$ or $S'_H < 0$[4]

I.5.2 According to identities (8) to (11) one can already derivate important results.

[2] It could be argued that interest on the public debt being the source of permanent income, low interest on public debt could have a negative impact on expectations. This negative outcome can be nullified by a true full-employment policy generating a strong rise in other sources of permanent income, wages and profits.
[3] For the sake of simplicity I assume that firms commitments to be met are equal to new investment.
[4] This system is more germane to a correct understanding than the usual accounting way emphasizing an I-S condition to explain(with D_G) the foreign surplus. S is a vague notion which aggregates wrongly household savings (gross or net) and firms savings (gross or net).

A/ The so-called twin theorem deficit is but a very peculiar case. It only exists when $S'_P \equiv 0$ which requires that firms get zero net profits because of positive banks net profits and no new indebtness (net) of household. All other cases are possible and they exist in reality.

B/ A State surplus could for some time coexist with a private surplus if there is a much higher foreign deficit (trade surplus). It cannot as it will be explained be sustained in the long run.

C/ At last a State balance coexists with a private surplus if and only if there is a foreign deficit. Even in such a case the foreign deficit could sustain net firms saving if and only if it is high enough to compensate for the negative impact of forced household saving leading to an unsustainable level of their net increase in indebtness.

D/ A foreign surplus may be higher than D_G if and only if the discrepancy between both is equal to the net deficit of the private sector. In such a case firms net profits are ultimately equal to the excess of the State deficit plus household net new indebtness over the sum of domestic banks net profits and foreign surplus (identity (16) with $S_H < 0$).

I.5.3 In this identity system the State deficit is the ultimate causal factor. The State is free to determine its expenditures (strong exogeneity in econometric terms, Giovannoni 2008 a) while it partly controls its tax revenue by imposing tax rates. It is true that there are exogeneous factors ruling the foreign surplus but it does reinforce the long run stabilizing role of the State as long as are some existence conditions met.

A/ The foreign surplus depends partly on factors which are exogeneous for the State as least in the medium run:

- The structure of domestic output relative to the structure of domestic demand reflecting long run household expectations
- The relative purchasing power of labour reflecting the structure of real wages.
- The exchange rates determining relative prices in the State currency units.

According to some starting empirical studies (Galbraith 2008, Parguez and Giovannoni 2009) these factors together could explain partly the increase in the American trade deficit relative to China since the late nineties especially:

- The accelerate decrease in the share of material output in the USA and the accelerated rise of truly non productive services (most financial services) which did not meet a genuine demand but were imposed by financial capitalism following the model of J.K Galbraith supply-imposed output structure.
- The ability of countries like China to provide more and more consumption goods incorporating high technology with lower relative purchasing power of labour. Imports of those goods do not reflect at all some dumping from China. To the contrary they reflect the high quality of Chinese labour pool and the Chinese lack of supply in the USA.
- At last, exchange- rates do matter and they are in the short or medium role beyond the control of the State and such a condition is required.

Thereby the State is obliged to plan a deficit high enough to prevent too strong a decline in the aggregate net private surplus. By planning too low a deficit the State would impose an unsustainable drop in household net saving just to protect expected net profits and prevent an unsustainable drop in employment accelerated by an increase in the required share of profit (a fall in the employment multiplier).

B/ It is thereby not true that foreign trade is an obstacle to the efficiency of a planned deficits policy whatever the country.
On one side the import of foreign cheaper consumption goods sustains the standard of living of domestic labour, it helps to maintain or increase the value of domestic labour given the threat of a drop in wages in monetary units. On the other side the imports of equipment goods again at lower prices reinforces the stock of domestic private equipment.
The role of fiscal policy out of planned deficits is twofold:

- It must help to protect ultimately the domestic labour because if the drop in labour income is too high the purchasing power of labour cannot be maintained by imports.
- In the long run it must target the growth of public investment which directly and indirectly softens the dependence of the domestic economy by adjusting domestic supply to domestic demand. It implies ambitious very long run programs creating new activities generating new commodities (tangible and non tangible). It should lead to a reversal of the long run tendency to a rising foreign surplus.

C/ The success condition of such a policy is that the State does not pledge to maintain a fixed exchange-rate as if we were still in the gold standard regime.
Let us assume the American case today with a foreign surplus higher than the State deficit. It means that foreigners accumulate deposits denominated in State units equal to the initial net creation of State money plus a share of the money created by domestic banks out of leverage (the financial stability law rules). Domestic banks do not, according to the law of financial stability, grant loans in foreign currency borrowed to foreign banks or foreign financial institutions.
Thereby the foreigners could want to sell a share of their surplus in domestic expenditures or other ones to finance acquisitions of commodities or assets abroad. Were the State committed to buy its own currency at a given price it would be constrained by available reserves in foreign currency. It would be forced either to run a foreign deficit by deflating its own economy or to borrow abroad by running a capital account "surplus". It would no more be master of its own currency and the whole circuit model would be upside down. It means that the existence condition of financial stability is to renounce to buy its currency at a fixed price. A floatable exchange rate is thereby the twin of a planned deficit policy. Foreigners would always get the amount of foreign currency at the price they are willing to pay and the State is no more constrained by foreign currency reserves. The more foreign holders of net saving prefer to get foreign currency, the more they are obliged to bet on a lower price of the domestic currency units.

I.5.4 It does not mean that abandoning the fixed exchange rate system in a stable world economy is the path to an exchange rate anarchy system. Ultimately exchange rates reflecting preferences of foreign surplus holders should gravitate around the long run relative values of State currencies reflecting themselves the ability and will of respective States to attain true full-employment. One could henceforth define what could be deemed for one currency its normal relative value or exchange rate. It is the exchange rate which helps to adjust the foreign surplus to the requirements of domestic full employment. It does not mean at all contrary to some naive interpretation widespread in some neo protectionist circles in France that for instance Chinese surplus should be suppressed by an ultra re-evaluation of the Chinese currency equalizing prices of Chinese imported goods to domestic production. Such an argument relies on the postulated abysmal under-valuation of the Renmibi relative to the US dollar and the euro rooted into the Renminbi supported by the accumulation of reserves in foreign currency by the central bank of China.

In terms of sound theory there is not the least reason why adjustment should be borne only by China. The euro is grossly over-valued taking care of the disastrous performance of the Euro zone core relative to labour value creation (the highest effective unemployment rate in the so called rich countries, declining purchasing power of labour). The US dollars itself is certainly still over-valued taking care of the growth of unemployment (much lower than in the Euro core). The US dollar should certainly fall (and not rise) relative to the Renminbi (a drop softened by a modest re-evaluation of the Chinese currency) The euro should certainly be strongly depreciated relative to all currencies. What maintains wrong exchange rates especially in the Euro zone is wrong policy choices of governments, European central bank, European Commission alike targeting the long run deflation of their domestic economies to induce speculative inflow of "capital" (Parguez 2008 a and b)

Part II The true roots of the financial crisis of 2008. The destruction of the stability conditions by wrong predatory policy choices.

Contrary to some over optimistic interpretations the financial world crisis which started in 2008 is not just the outcome of an unbridled speculation initiated by a banking system freed of any regulation. It is much more than a "Minsky moment". What reveals the financial crisis is the systematic violation of the whole stability conditions of the real dynamic monetary economy. It was deprived of any anchor by self-imposed policy choices aiming at substituting the State as a predator for the State as the protector of the welfare of the population. As I emphasized in a previous work (Parguez 2000) herein is the difference between the ongoing crisis and the last twenties early thirties crisis of the last century. Under the guise of a dogmatic free-market ideology deprived of any empirical foundations policy makers in USA and elsewhere mainly in Europe abolished true free choice for the majority of the population (it could be deemed authoritarian or despotic free market economics!)

II.1 *The destruction of the anchor of the real economy generated the flight to over speculation.*

II.1.1 A long time ago Eisner (1986) emphasized that the seventies stagflation cannot be explained by the failure of "Keynesian policies" targeting true full employment because they had been already rejected since the early years of the Nixon administration. Looking closely at the data for the American economy, Giovannoni and Parguez (2007) sustain Eisner claim. First government deficits were no more planned and thereby part of long run policy targeting true full employment. They revealed just the failure to attain the explicit goal of "fiscal responsibility" which explains why they had a declining impact on the generation of positive expectations. Next as soon as the late seventies and early eighties the rate of growth of aggregate State expenditures started to lag behind the rate of growth of the economy and the lag accelerated during the Bush years. Since the early eighties mainly during the predator years of the early twenty first century for the first time (Giovannoni 2008b) the share of labour income started to fall. As already proven it was not the outcome of a pure labour-exploitation policy led like in Europe especially in Germany and France. At least it was encouraged and applauded by the administration as a proof of the increased competitiveness of American firms out of the ultimate victory of "market forces". In terms of the employment function both facts reveal the violation of the two first stability conditions of the real economy. Aggregate profits were still growing at the same pace but it was not true for long-run permanent profits because of the vanishing support of State expenditures .Consumption was still growing at its long-run pace but the strength of the Giovannoni-Eisner accelerator effect started to decline because of the constraint of increasing anguish relative to the far

future survival of the process supporting the rise of consumption. Such an increased uncertainty led to a fall in the employment multiplier! Both forces together explain why true unemployment started to rise in the Bush years in terms of both job creation and income paid by firms. One must never forget that when the share of wages and salaries is insufficient to sustain normal (non- excluding) consumption out of rise in labour income, unemployment in true or living terms already exists. Thereby the pre –2008 crisis years make perfectly sense of what can be deemed the fundamental destabilizing process:

1-Renunciation to true full-employment policies. > 2-drop in the share of labour compounded by increasing inequality in pays. > 3-effective unemployment rises

∀

Δ

5- increasingly negative long-run expectations of firms relative to the future < 4-accelerated drop in both the share of labour and the share of "normal living pays" (more inequality in personal distribution)

Thereby the two first stability conditions had been simultaneously violated.

II.2 *Such a cumulative process explains the violation of the fundamental financial stability law.*

II.2.1 Phase 1 led to a fall in the rate of growth of the stock of sound public debt in banks balance –sheet. Phases 2 to 5 led to a dramatic increase in the rate of growth of the stock of private debt. An increasing number of household became forced to match the falling growth of their income by increasing their net debt to banks. The ratio of public debt to private debt fell quite below its sustainable long-term level, as already explained.

II.2.2 Henceforth two contradicting forces were animating the banking system bets on the future:

- Chasing customers they supplied rationed household with loans financing their most required consumption expenditures including of course home acquisition. Since household could no more meet their commitments (mainly mortgages) out of their future growth of income, banks managers had to rely on their own bets on the future value of the real collateral (future prices of homes). Thereby the privatisation of the credit base could not have existed without the speculation on the everlasting rise in home prices. The so-called "housing bubble" was induced by banks themselves. It helped them to acquire more and more dubious assets which meant leveraging beyond sustainability.
- On the other side as Keynes remarked in his treatise volume II (1930), bankers are a very peculiar kind of speculators. They cannot free themselves from their inborn fear of the future in their boldest bets. They want the paper profits of their bets but at the

same time they seek for insurance. Herein lies the ultimate root of the process of securitization and derivatives which increased beyond all previous levels (since the late twenties of the last century) the fragility of the credit system.

Banks managers transmogrified their dubious assets into bonds they sold to more audacious financial betters. Those bolder investors bought bonds issued by banks out of new banks loans. Banks were now feeling more secure because of the expected rise in the value of their bonds thanks to the buoyant expectations of their new debtors. Their initial debtors could fail to enjoy the capital gains on their house, their new debtors were sure to benefit from those gains.
Of course the game was not over; unfounded speculation triggered more unjustified speculation. New betters wanted to play and started to issue their own bonds embodying bets on the future of bonds issued by banks.

II.2.3 Ultimately instead of a monetary creation process rooted into State money and secure assets in the course of the Bush years a Babel-tower of private assets was built rooted into nothingness or quasi nothingness. It survived because of an increasing growth of banks loans which no more led (or for a declining share) to the generation of real wealth for the population in terms of purchasing power of labour. To be short, money creation was no more backed by real wealth and the ultimate sanction of the State. Herein is the truth of the core of the theory of value: the so much admired creation of financial wealth was a pure illusion which could vanish as soon as a shock how small it could be, could happen. Since the self –accelerating flight to pure finance was reflected by the self accelerating rise in the paper-value of stocks, herein is the justification of the corollary of the law of financial stability:

> A rise in the paper-value or artificial value of stocks which is not backed by or even indexed on the long run growth of State debt cannot last, it can be destroyed by the same little shock which reveals that the financial tower of credits was built on nothingness.

II.2.4 Monetary policy started to contribute to the tendency to unsustainable fragility. The Greenspan FRB played a crucial role in this escape to finance from an anchor-less real economy. Its contribution to the destabilizing process is twofold.
On one side it is guilty by inaction because it did nothing to prevent the race towards unsustainable fragility of the banking system. What explains this failure is the commitment of the Greenspan FRB to a pure private credit system no more depending upon the State creation of sounds assets. So strong was the faith of the Greenspan FRB into an anchor-less private credit system that it could not doubt the soundness of the pyramid of bets on the future on which relied the so-called "financial engineering". On the other side as forcefully proven by Giovannoni (2008 c), Galbraith and Giovannoni(2009). Under Greenspan the monetary policy was only targeting unemployment. It does not mean that it aimed at full-employment not at all. All empirical evidences prove that in the like of the ECB the Greenspan FRB feared full-employment and strongly believed in the absolute necessity of maintaining some "natural" or "normal" rate of unemployment while inflation vanished a long time ago when stagflation stopped. Thereby the FRB own rates remained too high relative to the extreme financial fragility of borrowers. They contributed to pessimistic expectations of the far future which can explain at least partly the fall in the employment multiplier. By his very commitment to an extreme form of conservative and predator free-market ideology, Greenspan finally did not get what he hoped. It could be that he believed that its targeted rate of unemployment was the "natural requirement" for the survival of the pyramid of bets on the future value of financial assets. Herein lies a truly predator vision of both "financial markets" and their protector as the

central bank: “Markets” those who bet and get credit to bet always more, dislike full-employment as long as it help them to escape in some very far future from the vision of a new wage-triggered inflation or State induced inflation. “Markets” thrive on some “natural” real constraint of the majority of the people (they do like inequality and its twin a low labour income share). The central bank is to deliver! What the Greenspan FRB had not foreseen was the inverse effect. Delivering too much it could accelerate the emergence of a dark vision of the far future requiring more and more credits to allow the survival of the financial artefact!

II.3 Ultimately, the condition for a sustainable foreign surplus was thrown away. So great were the gains expected from credits to pure financial operations relative to loans funding domestic productive expenditures that American banks started to grant credits in dollars to the foreign sector, foreign banks, foreign corporations and even foreign governments. Foreign banks hoped to thrive on the discrepancy between interest rates because American ones were still much lower than in most foreign countries (except Japan). On the other hand American banks were betting on the rise in value of their collateral, bonds sold by foreign banks that were their debtors The largest share of this creation of dollars registered in the capital account as a gross outflow of capital was undertaken as loans to foreign banks which next operated the recycling of these dollar deposits in loans to other banks of another country, or mainly, with the blessing of the IMF, to foreign governments. Finally a large share of those outflows of dollars was recycled into the American economy by their final holders to buy American financial assets.
The increasing if not dominant role of the capital account gave the final blow to financial stability in the pre-crisis years. It can be explained in terms of the final form of the fundamental accounting identity. The final surplus of the foreign sector (S''_E), its new saving fund S''_E sharply increased being the sum of the trade surplus and the capital account deficit. The whole foreign surplus had been initiated either by the trade deficit or by the initial outflow of dollars generated by banks loans to foreigners. Meanwhile the domestic private non banking sector was running an increasing net deficit because of accelerated forced householder debt. The State deficit had a declining compensating effect because it could not generate enough positive expectations in terms of the permanent profit flow. The final identity is thereby:
F_E being the capital account deficit in dollars and S'_E the trade surplus.
(foreign sector net surplus or new savings S'_E, S'_P Domestic net new savings, D_G State deficit)

$$D_G \equiv S'_P + S''_E \qquad (12)$$

With $S'_P < 0$

$$\text{And } S''_E = S'_E + F_E \qquad (13)$$

The State had a declining degree of freedom because of its own policy choices. Planned deficits had vanished and were no more on the agenda and the State deficit became more and more forced on the State to provide foreign financial investors of a minimum of sound assets. Finally the pace of the whole system to a mix of insolvency and lack of true liquidity could no more be slowed. It was henceforth relying on debts which could not be repaid on bets on some eternal illusion on collaterals deprived on any real value. The monetary circuit process could no more be closed (or completed)!

II.4 *The 2008 crisis as a perfect butterfly effect*

II.4.1 Had not reason vanished from the credit system by the very will of ideology driven policy makers for too long a time, the fact that some borrowers could not meet their commitment (the sub-prime shock) would not have unleashed forces of destruction within the whole financial structure. Even the fact that house prices started to drop would not have generated the crisis under normal conditions. Normality had been banished from an anchor-less system only driven by illusion of unlimited creation of false wealth out of money creation which was no more targeting the generation of real wealth. Such money had no more any extrinsic value it became truly created ex nihilo. It could no more be deemed as true money since it has no more any of the qualities of true money. It means that it is wrong to interpret the speculative always expanding sphere as founded on pure private money. Because of the twisted speculation of banks managers believing their financial engineers, a dangerous mix of bold bets and search for insurance, the whole financial superstructure was built on the hope that the future could be known and that an unlimited amount of wealth could be created at will out of sheer beliefs.
There happened a small shock and it was enough to reveal that beyond the veil of beliefs there was just nothingness. Doubts on the value of assets led at once to a cumulative reversal of bets on the future. The financial crisis was thereby born out of the systematic thwarting of the forces which had sustained the growth of the real economy.
As the true value of banks assets collapsed first in America and next world wide, banks were no more willing to provide loans to the real spenders. They strived to get their former loans repaid which triggered an already near stagnation of the real economy; the first stage of a true real crisis.

II.4.2 The collapse of the financial artefact accelerated henceforth a real depression which had already started. Being either bankrupted or deprived of their assets because of the collapse of pension funds which invested quasi forced saving of household into the most "rotten" speculative assets, household had to cut at once their consumption plans. The drop in consumption reinforced the drop in expected profits of corporations which had already suffered from capital losses and induced them to decrease the employment multiplier. Henceforth the accelerator effect played a negative role and new investment fell. The real crisis was now ruling, which strengthened the credit crunch. The collapse of consumption in the USA spilled other the whole world, Chinese exports collapsed, a whole social system built on private credits and Predator State was dying and it could not be restored. The lessons of the late twentieth century had been forgotten. Because of its own will the State could inflict more losses to the American and the world economy that the poor Hoover administration!

Part III Restoring the leading and animating role of the State by long run planned deficits is the sole sensible agenda.

There are two sharply conflicting agendas which reflect a contradictory interpretation of the crisis.

III.1.The conservative restoration program aiming at saving the failed private credit system. It has been pushed forward by the last "predators" governments, the Bush administration since it discovered the crisis and later by the European Union governments. Its core principle is to

build a new monetary circuit process entirely relying on private liabilities issued by banks with the minimum interference from the State. It is rooted (or seems to be) into four bailing-out rules aiming at saving the banking sector from its twisted bets:

III.1.1 Through the intermediary of the treasury the central bank is to provide enough State money to banks both to balance their losses from zero-value assets and restore their liquidity. The State hopes that banks would henceforth start again to grant loans financing wealth generating expenditures. By leveraging on this injection of State money banks could a new provide money to the real economy.

III.1.2 A share of the newly created State money may be used to buy the most value-less assets mortgages of near-bankruptcy household).

III.1.3 Financial intermediaries in the mortgage business are re-nationalized, which provides them with new State money to be used to help bankrupted household whatever the mechanism.

III.1.4 At last, credit lines in dollars are provided by the Federal Reserve to foreign central banks short of dollars, like the ECB, to allow them to bail-out their domestic banks heavily indebted in dollars to American banks.

Together those four rules give free hand to banks. Nothing obliges them to resume their productive credit activity. Nothing is undertaken to prevent a new flight to pure financial loans. Those rules cannot cure the real economy and restore the stability conditions. In some way it is the ultimate attempt to save the absolutist free-market ideology. One may go further it is ultimately the endorsement by the State of unbridled speculation since no true regulation is implemented to force banks to do their "job" justifying their existence, softening the constraint on productive spenders by leveraging on sound State money (including State bonds). The most stunning principle is the fourth one which, while there is not yet a genuine new international monetary system is just encouraging the "globalisation of finance" and rewards central banks while they praised sound finance like the ECB.
The conservative bailing-out is to raise the State deficit (since it is accounted as an increase in State expenditures) for the sole sake of the banking sector. It should not have the least positive impact on the real economy which is already in deep recession. Herein will be the legacy of advocates of fiscal responsibility wasting State money for deficits which are just subsidies to private banks! By ignoring the fundamental principle of the monetary circuit process (parts I and II) the banks bailing-out plan adds a new kind of purely bad government deficits. This agenda ignores the true nature of the crisis. It just aims atsome halt to the recession indued by the butterfly effect; it ignores the true ause of the magnitude of the shock resulting of the landing of the butterfly.

III.2Thereby the true salvation plan must reconstruct the infrastructure of a new long-run growth path more efficient and balanced than the previous one by meeting the true needs of the society.

III.2.1 First it requires planned State deficits both in the short-run and in the long-run[5]

[5] As proven in Parguez (2003) a long-run planned balanced budget (0 planned deficit) is unsustainable to reconstruct the foundations of a new long-run growth path. It is a factor of destabilization even if it aims at an

A/In the short run deficits are to be planned at a level high enough to save consumption by tax cuts benefiting to the "middle class" and save employment by emergency expenditures benefiting car corporations short of cash because of the drop in demand and the lack of new loans.
B/In the long run the increase in planned deficits must target both the strong growth of public investment as already defined and the growth of consumption by preventing a rise in induced taxation. So destabilized has been the real economy that there must be two phases:

- In the medium-run the growth of planned deficits must be stronger than its very long-run level just to reconstruct the dynamic process which sustained the leading role of consumption. Firms must again respond to household new debt by an increase in labour income. It reflects a rise in the employment multiplier or the reversal of the tendency to raise the share of profits. It must sustain the return to true full employment and a more equal distribution preventing the sub –prime disaster.
- There is more because restoring the financial stability law requires a very strong growth of the issue of State bonds to generate a sustainable ratio of sounds assets to private assets resulting from private liabilities. The ratio has to rise beyond its very long term level when stability will be fully restored. It would reflect the absolute necessity of a very strong increase of the growth of public investment beyond its very long-run normal level. It would also meet the necessity of restoring the purchasing power of household by lower taxation. It means that before attaining its far-future level the ratio of aggregate public debt to GDP has to rise very strongly.

In the long run the increase in planned deficits must target both the growth of public investment and the growth of consumption.

First let us recall that one of the long run goals of a strategy of investment growth out of planned deficits is to get rid of most of the structural failures in the structure of American output. It must target the creation of a strong equipment goods tier (to use Galbraith terminology) involving the most advanced bets on future technology and thereby on future final demand which do not yet exist. Herein lies the ultimate generalization of the Giovannoni-Eisner accelerator principle. It is true that expected consumption leads but only the State is endowed with the possibility of betting on a future which do not yet exist.
The strategy is thereby targeting the revival of the second tier in the production hierarchy, the consumption goods in their tangible or material form. No economy can survive only on services, but the Vatican may be. The issue is not to deprive household of advanced consumption goods, a share of their real capital at affordable prices relative to their incomes. It explains why I am not at all a supporter of neo-protectionism. What is at stake is the invention of a new world in which household will be attracted by a new kind of consumption goods providing them with a new capital. Only the State which spends the more in research (all kinds especially social) could create this new world with the strong rise in incomes supported by planned deficits impulse it could contribute to the end of the Wal-Mart world!

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increase in public outlays because it generates both a drop in private employment and in the purchasing power of labour income.

At last the growth of public investment by planned deficits must deeply change the last tier of the American economy the so-called services tier a "Prevert-Agenda"(from Jacques Prevert the poet) including the most basic needs (education, health, environment, legitimate recreation) to the most useless and socially destructive activities (in the like of a part of legal, financial and advertising services). For too long a time, the structure of the services sector had a deep destabilizing impact: the share of financial and legal services increased at an unsustainable pace (a root of the financial crisis as it will be explained) exacting extraordinary costs and pays while the basic services especially health and education became outrageously expansive and more and more unaffordable. Galbraith was the first to connect the rise of the share of services to the rise in inequality. Out of long-run carefully designed growth of public investment not compensated by "predatory taxation" the State may afford first-class health and education services to all citizens free them from the yoke of insurance companies and banks chasing students seeking for funds to finance their study. It would sharply squeeze inequality, raise the desire for new very high quality style of life and accelerate the decline of the Wal-Mart and cheap-food-health destroying world. As financial and legal services they thrived on the decline of the respect of the financial stability law.

Ultimately promoting a planned or intelligent design deficit policy the State is to adjust in the long-run the structure of domestic demand to the structure of the domestic supply.

- The search for new sources of energy and production consuming less energy is a crucial part of the strategy. It must cut one of the largest source of USA trade deficit the imports of oil and gas.
- At last there is not the least reason to be afraid of recycling foreign surpluses into direct tangible (possibly non tangible investment). As shown by Galbraith (2008) what deeply destabilize the real roots of American economy were the disastrous policy choices self-made in America by a predator State which increased (if not created) the dependence of the domestic economy. Things could only be better if those sovereign funds investment are animated by intelligent non predator States acting in cooperation with a new administration no more enthralled to short term predators and an economic philosophy ignoring out of a pure mix of dogmatism and short-term greed the fundamental laws of modern economy.

It has been shown that one must restore the major role of consumption as a determinant of growth of the American economy (Giovannoni 2008 a). Contrary to what is the core of what must be deemed the feudal-capitalism ideology of the European monetary union (Parguez 2009 b and c) there is not the least contradiction between the gowth of useful investment and consumption. The growth of private investment entirely depends on the growth of consumption (the dynamic accelerator effect) and ultimately the growth of consumption, through the employment function, depends on public investments. Thereby I think that one must spell out the concept of a super multiplier effect of public investments financed by the net creation of money by the State which reflects the planned deficit. This super multiplier includes the dynamic Eisner-Giovannoni accelerator effect. It explains why the planned deficit strategy must include lower taxation to prevent the rise in induced taxation that would be the outcome of a new wave of growth. It could prevent the required growth of consumption.

So destabilized has been the real economy that there must be two agendas:

The Conservative one	The Dynamic one
It relies on subsidies	It relies on net expenditures
to banks in the guise	for the real
of useless deficits	economy
squandering State money	The rise in public debt
It raises the	is a gift to the
public debt without	future because it is
any benefit for the	the engine of
real economy	future growth
It generates a true	It provides
burden for the future	the society with
The new debt is not	both a sustained
backed by the	growth in useful
rise in the stock	capital and
of useful capital	stabililizing assets
It does nothing	It helps to create
for the future	a future of hope[6].

III.3 *The dynamic agenda must be reinforced by stringent regulations of the banking sector monitored by a central bank not blinded by a conservative faith in the perfect rationality of financial markets.* Three rules should be implemented they perfectly fit the core principle of the monetary circuit process:

III.3.1/ What must be saved from the conservative agenda but generalized is the emergency nationalization of the mortgage sector as long as stability decision should be the creation of a specific national mortgage administration endowed with enough State money to buy all existing mortgage at the ongoing price to creditors. Either it would grant new long term loans at fiscal low interest to debtors or it would transform the mortgage into long term lease at affordable rent for the poorest household. In any case thanks to the agency no household would be deprived of its home.

III.3.2/There must be an absolute dividing line between pure banking activity financing productive expenditures and pure financial activity subsidizing speculation by credits. Banks proper should be forbidden to grant loans which do not instantaneously generate wealth out of expenditures. Banks should be obliged to take full responsibility for their bets which requires to stop the escape to securitization and pseudo insurance derivatives.

III.3.3/Banks should be obliged to respect the financial stability law by meeting a sustainable leverage ratio rooted into hard and secure liquidity (State money as reserves or treasury bonds).
Together those rules will prevent the unfolding economic scandal: banks getting State money and maintaining the credit crunch. The pure financial "industry" is to be let alone which excludes any kind of bailing-out. It has been the engine of over speculation and the ignorance of the fundamental law of value.

[6] It means that contrary to the old Keynesian multiplier, the super multiplier is not constant over time. There is not yet methods to compute it. The conventional miltipliers are meaningless.

Thanks to the dynamic agenda the State deficit will stabilize the world economy giving time to net exporting countries to escape from depression of their real economy as long as they have not yet been able to substitute domestic demand for exports as the leading factor of growth.

III.3.4/ Meanwhile new rules are required to engineer a new international monetary system aiming at softening the burden charged on the American fiscal policy by the increasing inflow of recycled dollars. It has been explained why it could increase too much the share of American public debt held by foreigners. Foreign central banks should be required to impose stringent limits on the borrowing of dollars by their domestic banks beyond what is needed for imports. Or, at least, they should impose a compulsory ratio between liabilities issued in dollars by their domestic banks and their own (non borrowed) reserves. No return to normality can be hoped as long as banks of any country are free to borrow everywhere in any currency to recycle those borrowed foreign resources into any other country to fund bold ventures creating no wealth or at least generating no resources that could be used to repay the initial loans . Such a game of rampaged bankers ignoring the most fundamental laws of economics as if they were sovereign of their own is both useless and destructive.

III.3.5/Ultimately the American Treasury would be no more constrained by the recycling of dollars initially created by American banks for foreign banks (and foreign institutions including governments). The capital account surplus would no more absorb treasury bonds lost for the domestic economy. Such a reform should open the way to a more stable exchange rate system while maintaining the floating existing order. For instance it should prevent an appreciation of the dollar which could have a negative impact on exports.

In guise of conclusion

At the time when this essay is completed, even the near-future is clouded. We may hope that the Obama administration in the USA will, sooner or later, choose the dynamic agenda. There remains a formidable obstacle to the success of a world dynamic agenda, the stubborn commitment of the European leadership, from all denominations, to that predator aspect of free-market ideology which caused the crisis. Could they change their mind under the pressure of reality? It is yet unknowable.

What is certain is that, contrary to the 1929 and aftermath crisis, the new crisis has been entirely explained by the worse policy choices everywhere. It does not reveal the disparition of the State but the transmogrification of a State dedicated to the welfare of the people to a dogmatic Predator State. I emphasized this transformation of the State under the guise of let us free hand to markets in Parguez (2008). Galbraith (2008) illustrates in a convincing both scientific and horror story the ultimate outcome of the great transformation of the State from a welfare State to a Predator State.

There is hope in USA because as the value-less pyramid collapsed, its supporting faith vanished or could vanish if reason prevails. Contrary to optimistic views, in Europa hope is still far away there. Real economy in the Euro core has been devastated for so long a time by shock therapy turned into a permanent treatment that its reconstruction will require much more new State spending than in the USA. At the same time as explained in Bliek and Parguez (2006, 2007) and Parguez (2008 a and b) the ruling economic ideology seems to survive the collapse of the cards pyramid. As nobody dares to doubt the agenda of the Predator State either from the left or the right amid the leadership with its whole paraphernalia of public debt burden conservative social reforms aiming at "flexibility" and decrease in State expenditures to increase savings.

Finally it is vain to call for the great shadows of the past. The 2008 crisis reveals that their world was dead for a long time and the past cannot be created a new. The 2008 crisis is not a new 1929 crisis because of the causing role of policy choices in economic shocks. Another world is dead with its supporting culture of Predator State-free market exploitation, negation of the law of value. What is needed is truly new economics injecting great ideas of the past into a world in creation. A lot is yet to be done I recognize relying more on sound empirical studies than on dogma!
Relative to the USA expected or at least possible victory of pragmatism shakening the conservative consensus ruling the Euro core is to be a very hard job if not an impossible one in absence of an awakening of the people!

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