

Money Creation, Employment and Economic Stability: The Monetary Theory of Unemployment and Inflation

Alain Parguez*

Summary: This paper by building on the general theory of the monetary circuit, proves that money-as a pure bank credit liability-exists to overcome constraints on required expenditures by firms, household and mainly the State. From this perspective the paper derives the employment function in the modern monetary economy. Thereby it is explained that full employment policy is both always possible and required. It is proven that this conclusion holds in a perfectly open economy. Ultimately it is explained that there is no trade-off between full employment and sustainable price stability

Key words: Money, Banks, Employment, Fiscal policy, Phillips curve, Inflation, Exchange rates, Deficit, Consumption, Investment

JEL: E24, E31, E62

Forewords: What is at stake?

This contribution is to be read as the core of two chapters of a forthcoming book I am writing with Jean-Gabriel Bliet and Olivier Giovannoni, the provisional title being “Money creation, employment and economic stability”. It is the outcome of a converging set of events which dismissed my previous doubts. There was first a conference made with Jean-Gabriel Bliet at the European Investment Bank (Luxembourg). It convinced me that it was possible to shake the faith of true policy makers in “hard-squeeze economic policy” by explaining the core principles of modern monetary economy as long as they are sustained by hard empirical studies. Next, I became aware of a converging set of criticism arising from economists of various denominations: the theory of the monetary circuit is not worth attention because it is not embodied into models; in any case they cannot explain what should be a sensible economic policy because they ignore the stock dimension and, the worse of the worse, they postulate full-employment

* Professor of economics, University of Besançon: alain.parguez@neties.com. Here is the revised version of a paper presented at the Third International Post-Keynesian conference of Dijon on November 30 2007. I took care of comments by Olivier Giovannoni on the original version to write this final version. This paper will not have been written without the friendly requirements of Jean-Gabriel Bliet, Thomas Ferguson, James Galbraith, Olivier Giovannoni, Daniel Pichoud, Henri Sader and Mario Seccareccia. *Received: 10 February 2008.*

(Accoce and Mouakil 2007, Kregel 2006). The last accusations does not require attention since most of my previous work dealt with the explanation of unemployment. I do not understand why emphasizing that money exists as it will be explained to remove the scarcity constraint is tantamount to a super-post walrasian or Says like theory. It is true that I reject the keynesian liquidity preference theory (I am not the only one) but only because it lacks sensible foundations in a true monetary economy. As for the ignorance of the “stock dimensions” and thereby of the role of capacity utilization, the reproach is wrong. It is impossible to analyze the monetary economy by only emphasizing “pure flows”. I shall restate the crucial role of “stocks” and thereby net worth effects in both the explanation of unemployment and inflation. It is crucial in the proof that there is no trade-off between full-employment and inflation. At last, the first reproach hides a deep misunderstanding of the scientific method amid contemporary economists. It lies in the confusion between plausible or testable general theory and small self-isolated set of simultaneous mathematical equations requiring excruciating assumptions to be built. As such a general theory is already a model of an extremely complex universe, it already requires abstraction and consistency. As shown by Lindley (2006) in his wonderful story of modern quantum physics theory comes first models in the restricting sense after and they do not required the blithe ignorance of core characteristics. In a short way, I do not reject modelization in the narrow sense but I am not yet aware of its ability to encompass the core characteristics put forward by the general theory. In any case, I am stunned by the serendipity of the critiques relative to empirical foundations do they exist or not?

Herein is the last resort explanation of my effort to set the record straight on the theory of the monetary circuit. The ultimate impulsion has been the empirical studies of my friend Olivier Giovannoni. Building on the Johansen-Juselius method of Errors correction models generalizing the cointegration statistical methodology (Juselius 2006), he could transform the fundamental accounting identities on which rely modern monetary economics into long run relationships allowing causality analysis. His outcome are already impressive, especially as it will be explained the leading role of consumption as an exogenous variable the perfect passive role of investment depending on consumption the exogenous nature of public expenditures. It will be explained that they fit the full endogeneity of money for all the agents, the proposition that the State is not constrained by tax in its expenditures, the now obvious fully negative role of thriftiness. Such an increasing empirical support strengthens the core propositions, which shall be proven: without a long run full employment policy, sustaining the growth of consumption and State expenditures unemployment is to rule. There are no constraints on the State : the sole way to generate true price stability is to target full employment. It will be proven that there is no true foreign constraint and there is no trade-off between inflation and employment.

I/ The dynamic Process of Real Wealth generation out of Money creation

To comply with the positive method I shall start with the two twin identities upon which the National Accounting system relies:

$$Y = C + I + G + E - M \quad 1.1$$

$$Y = W + P + R + T \quad 1.2$$

According to 1.1 the net value added or the aggregate net wealth created to monetary units in the accounting unit Y is always equal to the sum of aggregate expenditures aiming at the acquisition of domestic net output, domestic consumption, domestic private investment, aggregate state expenditures and the trade surplus (positive, negative or null).

According to 1.2 Y is always equal to the sum of incomes accruing to domestic groups the wage-bill (W), profits (P) rents or net interest R and taxes T. From these twin identities stems the conclusion that there are four groups acting in the economy firms, household, the state and the foreign sector. Their expenditure on the given accounting period generates Y, which is split between incomes accruing to the spending groups.

As such, 1.1 and 1.2 cannot explain or unravel the process out of which groups spend and earn their income, they do not imply any specific causality. The sole way of introducing causality is to put in the front stage the monetary nature of the economy. To bring about the proof I shall first address an economy without foreign sector and next it will be proven that the proposition, the cornerstone of the theory of the monetary circuit perfectly holds in an open economy.

I-A/ Money creation in the simple economy as the existence condition of expectations.

Each group starts with expectations: firms target their net increase in own wealth or profits, household target their own increase in net wealth or consumption and the state targets its expenditures deemed to be necessary.

To attain those expectations each group knows that it has to undertake effective expenditures and thereby that it has to be endowed with the required amount of money. The existence condition of the modern economy is that there must be a specific group, the Banking sector, the role of which is to provide the spending groups with enough money to attain their expectations. The banking sector includes commercial banks and the central bank.

I-A-1 The core process of money creation

Each group is to be able to ask for money to the banking system so as to fulfill its expectations. Let for instance F_x^* , be the amount of money the group x needs to undertake its required expectations. It addresses its demand to a bank b part of the banking system. Let us assume that b endorses x expectations through a credit contract with x .

As soon as x expectations are endorsed, b is committed to provide x with the possibility to instantaneously undertake the required expenditures. Thereby the endorsement generates an instantaneous debt of b , which is the amount of money denominated in State unit of account created for x . The counterpart is –in b assets side- a debt of x to be paid in the future out of future gross income of x . Ultimately it is straightforward that the creation of money entails three debt relationships:

- b debt to x
- x debt to b
- and the instantaneous spending of the money which reflects the acquisition by x of commodities and services. It is tantamount to the payment of the debt entailed by the transfer to x of commodities and services.

From this analysis of the money creation process, stem the fundamental characteristics of modern economy.

1. Money is perfectly endogenous
2. Money is the outcome of a balance-sheet banking operations involving three relationships
3. Money is to be defined as the banking system liabilities generating expenditures aiming at the creation of real wealth. It is tantamount to the proposition that the counterpart of those liabilities is wealth-generating expenditures.
4. Money is destroyed (or cancelled) when initial future debts are repaid. Herein lies what must be deemed the fundamental law of the circulation: money exists to undertake required wealth-targeting expenditures It is to cease to exist when those expenditures are undertaken, which reflects that expectations are met.
5. Ultimately, 1 to 4 lead to the conclusion that the very notion of a demand for money as an asset is inconsistent with the nature of money. It means that in a monetary economy money cannot be a “reserve of value” because it would imply that it has some “intrinsic” permanent value. The law of circulation imposes that money has a pure “extrinsic” value which is the net real wealth resulting from expenditures generating its creation.

I-A-2 Is the banking system constrained or not?

1- The false constraint: the “liquidity constraint”

1.1 As a whole banks cannot be short of “liquidity”. What is “liquidity” but money materializing as deposits reflecting credits endorsing expectations, what is deemed loans? Herein is the truth of the famous statement: “loans make deposits” or loans makes liquid resources”. It explains why it is not sensible to imagine some “banks preference for liquidity”.

1.2 What is true is that in a multi-banks economy money exists if and only if there is a perfect and instantaneous convertibility of banks liabilities. Convertibility requirements results from the fact that a share of each bank liabilities has to be converted into other banks liabilities in the course of initial debts to banks reimbursement. Herein lies the core role of the central bank: it issues its own liability, the “hard money” or “reserves” which may be converted into any bank liabilities without delay and at zero cost. Thereby banks can always borrow reserves whatever the mechanism to ensure the convertibility of their liabilities. They pay an interest to the Central Bank but they cannot be “quantity constrained” by the Central Bank in a fully monetarized economy.

1.3 In a multi-forms of money economy, the Central Bank ensures the permanent convertibility between all the forms of money; let us say banks deposits and Central Bank or State notes. A share of deposit being converted into notes, banks need for reserves to sustain convertibility. The Central bank is thereby obliged to meet banks need for reserves to prevent a failure in the convertibility process, which would jeopardize the very existence of money. Let us emphasize this outcome because it has been strongly debated.

Banks cannot be “quantity constrained” by the Central Bank because it would contradict the very principle of endogeneity of money. “Reserves constraints” would deprive banks liabilities of the nature of money.

2- The true constraint: the net wealth or profit constraint

2.1 It has first a “negative aspect”. Banks are constrained by the expectations of spending groups. It means that money cannot be created “ex nihilo” since it is the outcome of required expenditures targeting increase in real wealth. Herein lies the true meaning of the endogeneity principle and the demise of any notion of the “supply of money or credit”. In a monetary economy, the quantity of money created at time t is identical to the effective demand addressed to the banks.

2.2 It has secondly a “positive aspect”. Commercial banks whatever are private firms targeting the growth of their net wealth (or capital) out of their net profits. Banks net profits are equal to their gross profits minus what is distrib-

uted to stockholders. They are invested into financial assets sold by debtors to finance their interest bill. In the modern monetary economy, banks are obliged to maintain “capital ratios” monitored by Central banks, which reinforces their profit constraint. There are two sources of banks profits, net interest income, the long-run component¹, and capital gains (positive, negative or nil) generated by fluctuations of the money value of banks assets. The profit constraint has two consequences:

-It explains both the existence of the rate of interest and its level. The Central bank own rate is the root of the rate of interest (or the set of rates) imposed on debtors because the crucial cost of banks is the cost of Central Bank ultimate liquidity. For a given targeted growth of their net worth banks apply to this primary or fundamental cost a multiplier (or a set of multiplier) reflecting their required average rate of profit. Herein lies the full exogeneity of the rate of interest as a pure policy parameter. The empirical proof is provided by Galbraith, Giovannoni and Russo (2007) for the American economy. On one side the base rate reflects the sole exogenous decision of the Federal Reserve Board led by political motives. On the other side, all interest rates are led, with some lag, by the Central Bank own rate.

-It also explains the credit worthiness norms imposed by banks on debtors. Taking care of the uncertainty factor (the unknowability of the future) banks strive to prevent failure of expectations, which would generate capital losses or lower capital gains. The profit constraint explains why the so-called “credit rationing” is perfectly consistent with full endogeneity of money.

I-B/ All spending agents have access to money but not on equal terms

A fundamental distinction is to be drawn between the Private Sector and the State

I-B-1 The Private sector is constrained

1. It is true for firms. Firms may finance all their required expenditures, wages and salaries (and pensions) and investment and interest out of money creation. There is not the least reason to exclude investment without contradicting the very nature and definition of money. It means that the whole amount of money created for firms account is not necessarily to be destroyed in the same accounting period. According to the law of circulation investment loans are to be repaid out of future profits generated by this addition to equipment. It does not contradict the im-

¹ To be simple, I include various fees or not interest incomes in the interest income itself.

possibility of a reserve of value motive. Assuming that firms recoup more money than they have to pay back does not imply any demand for money function. These monetary profits are to be recycled in the next production process, which endows them again with real value².

In any case, firms' access to money is constrained both by their long-run profits expectations and by banks ability to believe in those expectations. Herein the crucial role of profits expectations is put in the front stage; the existence condition of the system lies in the attempt to find anchors to those expectations (Giovannoni 2006; Giovannoni and Parguez 2007a). Profits expectations are derived from the accounting coming from 1 and 2

$$P = (C + I + G) - (W + R + T) \quad 3.1$$

$$P = C + I + (G - T) - (W + R) \quad 3.2$$

Where P accounts just for effective or earned profits abstracting from cyclical capital gains. To go further one needs to search for long-run anchors and thereby for exogenous components framing firms (and banks) judgement. It has been proven by Giovannoni and Parguez (op cit) and mainly by Giovannoni (2006 b) for the American economy from 1954 to 2006 that G is exogenous both in the short and in the long run. It means that the growth rate of G is one anchor of expected growth of profits. T is partly exogenous and the growth of T has a negative impact on expected profits. The anchor role of G means that firms are certain that the State will not strive to compensate the growth of G by higher taxation as long as there is not enough compensation from an other anchor. Herein lies an explanation of the positive role of State deficits as it will be proven.

-C is also exogenous relative to all incomes and other expenditures and it has the strongest positive impact on profits mainly in the long run. It leads to the long run consumption relationship:

$$C_t^* = W_t + dD_h \quad 3.3$$

Where dD_h is the net increase in household indebtedness to banks matching the lack of income to meet the consumption target. C_t^* enshrines household long-run expectations of the growth of their real worth (or well being) it includes housing expenditures. The consumption identity embodies the fact that dividend and net interest are a rather insignificant

² I assume, which is not far from reality, that most profits are « retained » by firms, thereby I abstract from the dividend component in net household income. Recycled profits cannot be assimilated to a demand for money by firms. Were they “hoarded” they would lose value and firms would be guilty of monetary illusion.

part of household income in the modern monetary economy. 3.3 reflects the twin structural aspects of the modern monetary economy especially in its American avatar. Instead of the erstwhile version of a capital accumulation driven society there is a consumption-driven society which is “also a Public Expenditures driven society” as shown by Galbraith (2006) and Blicq and Parguez (2006, 2007). 3.3 leads to the generalized profit identity:

$$P = (I + dDh + g) - R \quad g \text{ accounting for the budget deficit.}$$

-I in the long run is strongly endogenous being entirely determined by consumption. Such a causality unravels a “dynamic long-run acceleration factor” (Giovannoni 2006a). To the contrary I does not depend on profits, whatever the Profits variable. It displays the role of the capacity effect, which can therefore be part of the model of the monetary economy. The long run causal relationship implies the existence of a long run rate of utilization of equipment while cyclical fluctuations are the outcome of short-run errors in expectations raising the rate of utilization above or below its normal level.

-Ultimately, R the net interest income is both exogenous and endowed with a strong negative impact on profits. Such an outcome is perfectly sensible because R can be defined as banks net profit which is a drain on firms net worth (directly or indirectly through the levy on the other agents). It accounts for the net saving leakage. As already proven in the long-run the growth of R is pure policy factor so that the ratio of R to Y_n , is to be a pure exogenous parameter.

From this analysis stems the conclusion that firms expectations are ultimately anchored into the growth of consumption (positive impact out of the direct effect and the accelerator effect), the growth of public expenditure (positive impact) and the growth of the Rentier income (negative impact).

2. Contrary to a widespread assumption, household have access to money to attain their long-run expectations. It is the existence condition of the exogeneity of consumption growth. Household increase their stock of debt because they are certain that they could meet their increased future commitments (interest plus debt reimbursement) out of the growth of their future income generated by their increased expenditures³. Such a

³ It implies that identity 3.3 before holding for household contradicts the conventional consumption function inherited from Keynes.

bet on the far future is successful as long as it fits firms own long-run expectations. It means that ultimately household are constrained by firms' expectations and banks expectations of firms response to household-generated profits.

I-B-2 The State is not constrained

Contrary to the private sector, the State is not constrained. On one side, the State undertakes all its expenditures out of money creation. As soon as the State decides to spend for services or commodities, the treasury sends a cheque to the private seller who deposits it at his (her) bank. There is an instantaneous increase in the quantity of money, the counterpart being in banks assets a claim on the State. State expenditures generates an instantaneous creation of money reflecting an automatic credit (or loans) of banks to the State. From this core mechanism, stems the fact that taxes cannot finance State outlays, they just cancel or destroy an equal amount of money when they are raised. Understanding that the State does not finance its expenditure by its tax revenue is the *Sine Qua Non*, the Ultimate cornerstone of the positive theory of the modern economy. The proposition holds whatever the relationship between the Central Bank and the State. In the American Payment System, the counterpart of automatic banks credit is an increase in banks reserves while tax payments destroy reserves. In the Euro payment System, taking care of the abolition of links between States and the Central Bank State expenditures do not lead to an automatic increase in reserves. In any case, banks are to spend their non interest bearing liquid claims on the State or the Central Bank to acquire interest bearing bonds. It leads to the fact that the State cannot be constrained by the so-called demand for bonds. There is a robust empirical proof of the proposition that taxes cannot finance and therefore constrain State expenditures. The proof is straightforward. It has been proven that State expenditures are exogenous relative to all private variables. Were G constrained by the tax revenue it would not be true because the tax revenue is not fully exogenous. Thereby G is not financed by taxes.

On the other side, exogeneity means that G being not constrained by taxes the State is free to determine its deficit, the excess of G over taxes. It cannot be constrained either by private expectations or by banks profit expectations contrary to firms and household. Herein lies the ultimate or last resort anchor of the growth of State expenditures for private and banks long-run expectations. The final explanation lies in the leading role of the State deficit and Public Debt.

I-C/ The anchor role of the State deficit and public debt

I-C-1 For each group one may define its accounting deficit (or negative net saving) as the excess of its aggregate expenditures over its receipts. Thereby g , Df , Dh , Sf , Sh , Sr being the State deficit, firms deficit, household deficit, firms net saving, household net saving and banks net savings. From 3.3 we derive the fundamental identity:

$$P-I = Sf = g + dDh - Sr \quad (4)$$

Assuming for a while that household turn into net savers to strive to fund their pensions, in 4 instead of dDh we have Sh

$$Sh = -dDh \quad (5)$$

Thereby the generalized accounting identity becomes

$$Sf = g - Sh - Sr \quad (6)$$

$$g = Se + Sh + Sr = Sp \quad (7)$$

Sp being aggregate net saving of the private sector as whole

From (7) stem crucial conclusions

1. As already proven in 7 the causal factor is the State deficit. 7 means that the State deficit automatically creates an equal amount of saving in the private sector.
2. 7 unravels the true Trade-off in the monetary economy (Blik and Parguez 2007). For a given amount of expected profit, there is a inverse relationship between g and Sh . The more the State decides to curb its deficit the more households have to squeeze their saving and turn into net debtors. Inversely the more household decide to save (being afraid of the future) the more the State has to run its deficit to “save” firms net profits. Any attempt to curb the State deficit crowds out household savings or (and) firms net savings.
3. Ultimately, State “negative saving” is the existence condition for an effective increase in net wealth of the whole private sector. It explains why the State cannot be constrained by banks for deficit and thereby why it is free to determine its expenditures.
4. A State positive saving (or surplus) has the inverse effect. It reflects a fall in the private sector net wealth as a whole.

I-C-2 As already shown, contrary to a wide spread opinion, the State is not obliged to sell bonds to finance its deficit. The truth is that bonds sale is just an

offsetting operation substituting in banks assets Treasury bonds earning interest for excess reserves or liquidity earning no interest. From this fact stems the so-called “constraint on the Public Debt”. There would be an exogenous limit of the Public Debt because of the burden or drain it imposes on the private economy! Such a drain cannot exist in a true monetary economy.

1. According to identity 7, the growth of public debt is the counterpart of an increase in private net wealth (or a decrease in private net debt). Such a positive wealth effect operates in two ways: it compensates for depressions induced by firms errors of expectations, this anti-cyclical effect is very strong in the USA as shown by Giovannoni (2006a) and Eisner (1994); on the other side it provides firms with enough net profits to strengthen their positive expectations by adjusting them to household own ones. Firms may always bet on the required deficit to match negative factors (fall in household growth of indebtedness, increased banks fear of expectations failures).
2. Interest on the public debt is the bulk of the net interest income R . Thereby interest paid by the State is the main source of banks net profits in the long run (by abstracting from capital gains). For a given banks profit constraint, State interest payment must soften the creditworthiness norms imposed on private debtors.
3. In any case as already proven the rate of interest on bonds is entirely determined by monetary policy. The study of Galbraith, Giovannoni and Russo (op cit) is straightforward: the bonds rate adjusts very quickly and positively to the Central Bank own rate. If policy makers are truly worried by the “burden” the ratio R to Y they must always maintain the rate on bonds quite below the rate of growth.
4. Finally, as shown first by Domar (1949) and next by Eisner (1994) for a dynamic economy like the USA, the State deficit accounts for public investment tangible and not tangible. The counterpart of the growth of the public debt in the State capital accounts is an increase in real assets providing the society with an increase in its real wealth. There is a “public wealth effect” which reinforces the direct private wealth effect. It sustains the growth of firms expected profits because they always bet on more buoyant household expectations while reinforcing household confidence in the future, which strengthens the role of macro-economic policy as the adjustment factor of private expectations.
5. 1 to 4 are enough to explain that there cannot be a “reimbursement constraint” in a dynamic monetary economy. The amount of money received from the State (as a part of aggregate expenditures) to redeem matured bonds is to be reinvested automatically in new bonds.

I-D The Generalization to the open economy: there is no foreign constraint?

Since its inception, one of the most widespread objection to the positive theory of money has been that it could only hold in a close economy. What is at stake is thereby the famous “foreign constraint”.

I-D-1 What is exactly that “foreign constraint”

Over time, two aspects of the constraint have been emphasized the “liquidity shortage” and the “twin deficits theorem”. For the sake of simplicity, I assume that there are two countries the domestic economy d and the foreign economy F , each with its own currency m_d and m_f , z being the price of a unit of m_d into m_f , the exchange rate.

Let B be the trade deficit of d denominated in m_d units.

1. According to the core principle of the monetary economy d banks have created B units of d to meet the net acquisition of F commodities and services by d agents, F firms get B units of d as deposits in d banks, they instantaneously ask for their conversion in F currency. Herein would lie the “liquidity constraint”: B has been determined for some level of z , z° ; d banks cannot meet banks conversion requirement; they have to borrow “reserves” in F to the Central bank but how could the Central bank get enough reserves. Ultimately, default is expected, leading to a collapse of the exchange rate accounting for the widespread cumulative failure of expectations. The lesson of this catastrophic scenario is obvious: the State in d is strongly constrained by the amount of owned foreign currency reserves. It has to put harsh limit on the access to money creation! Ultimately, in the open economy, money is no more endogenous, the monetary circuit theory holds no more!
2. The “twin deficit theorem” relies on two postulates:
 - Any state deficit generates a trade deficit
 - The trade deficit is equal to the budget deficit

I-D-2 Neither the “liquidity constraint” nor the “twin deficit theorem” hold in a true monetary economy

1. The story relies on one (not always explicit assumption): a fixed exchange-rate at a pure exogenous level. To comply with these self-imposed constraints, the Central bank is obliged to ensure the conversion of any amount of the d currency at a fixed price. Let us drop this as-

sumption, which does not fit the core principle of the monetary economy because the role of the State is to minimize constraints on expectations and not to enforce a constraint contradicting the very nature of money, which is absolute endogeneity.

Thereby to ensure the conversion d banks have just to buy F currency to F banks at the agreed price or exchange rate. F banks are to provide all the F currency amount at the price, which fits their expectations. At this price, d banks get the required amount of foreign currency, which materializes as an increase in F banks deposits. The counterpart in their assets side is deposits in de banks in d currency. Finally, the existence condition of B is an automatic financing reflecting the creation of money in both d and F. The theory of the monetary circuit perfectly holds. As long as B is greater than expected, such an automatic financing of B is to require a fall in x (depreciation) relative to its former level.

Bankruptcy or just default cannot happen in a floating exchange-rate system out of cumulative depreciation reflecting a flight from the currency.

2. The two postulates of the twin deficits theorem are “invalid” relative to empirical facts as shown for instance by Blik and Parguez (2007a) for three reasons:

- It is rare to observe both a budget deficit and a trade deficit

- When they simultaneously exist, the trade deficit is not equal to the budget deficit

- Looking closely at the USA case from 1954 to 2006, one must doubt the conventional causality going from the budget deficit to the trade deficit. The inverse could be true: the causality could go from the trade deficit to the budget deficit. It would mean that the trade deficit depends on factors exogenous relative to the impact of the budget deficit on aggregate demand in the like of the exchange rate and the structure of domestic production. In such a case, the budget deficit plays the part of a compensatory factor offsetting the impact of the trade deficit on aggregate demand.

Thereby the fundamental identity 7 can be generalized. From the twin accounting identities:

$$Y = C + I + G - B$$

$$Y = W + P + R + T$$

One derive the generalized profit identity

$$P = I + dDh + G - B \quad (8)$$

With $B=S_f$ (9)

S_f being the foreign saving (net profits) reflecting the trade deficit accounted in d currency units. From 8 and 9 stems the ultimate accounting identity

$G=S_d+S_f=S_e+S_h+S_r+S_f$ (10)

I leads to the following conclusion proving that the theory of the monetary circuit is truly germane to the modern monetary economy.

-It is grossly wrong to believe that the deficit country needs foreign saving to finance its deficit. The trade deficit is genuine net saving for the foreign country and therefore it generates net wealth. What is true is that F banks invest their deposits in income-earning assets in the d country, usually treasury bonds. Assuming that the budget deficit is not high enough to provide new bonds, the d Central bank has to sell bonds to foreign banks to prevent a rise in bonds price and therefore a fall in the interest rate that would change the yield-curve targeted by the Central bank. One has to emphasize that the cornerstone of a positive theory of the monetary economy is the couple of the two crucial propositions or theorems:

-first, the State cannot be constrained in its expenditures because it has free access to money.

-last, the trade deficit cannot absorb pre-existing saving

-The budget deficit allows the creation of net saving for both the domestic economy and the foreign sector. Assuming that the trade deficit is exogenous, the State has to run a deficit large enough to provide the domestic sector with enough net wealth to sustain long-run dynamic expectations. Thereby ultimately, it is always true that the budget deficit must be a policy parameter in a dynamic economy like the USA. This conclusion perfectly applies to the French case in 1983. As already shown by Eisner (1983) and fully documented by Bliet and Parguez (2008), the dramatic turn in the Mitterrand Administration policy was the outcome of a pure choice rooted into a deeply conservative economic ideology.

3. It is at last time to tell the true French story Eisner (1983) strived to warn against the veil of self-justifying rhetoric but so strong was the desire to believe in the foreign constraint that it was ignored and it is still ignored (Bliet and Parguez 2008).

The story would be true if two conditions were met: the French U-turn was forced on a despaired government; in the long run it has been a success.

None is true! In spring 1981, France was still bleeding out of shock therapy of the Raymond Barre deflation program decided in September 1976. An arch-conservative economist inspired by Hayek and his French disciple Rueff, a perfect apostle of the French Economic Ideology (Bliet and Parguez 2006, 2007b). Barre purpose was to save a fixed-exchange rate of the French franc relative to Deutsch mark and the US dollar reflecting a strong appreciation (the so-called strong currency principle). The result was catastrophic: collapse of consumption, induced drop in investment, rise in unemployment and lack of confidence in the currency leading the government to engineer speculation by borrowing US dollars through the veil of State companies and high interest rates.

Contrary to a widespread belief, as shown by Eisner (1983), Bliet and Parguez (2006) the early outcome of the reflation policy of the socialist-led government was a success. The twin deficits theorem did not hold. Net profits started to rise again, consumption rose which sustains the increase in net investment, unemployment started to decrease. Thereby it is not true that the State deficit increase generated an equal trade surplus, which would have prevented any positive impact on the economy. What is true is that the new government remained enslaved to the Strong Currency Principle and therefore rejected the very idea of a devaluation. The outcome was a drain of reserves foreign currencies, the compounded effect of the trade deficit and the “flight from the currency” reflecting the liquidation by foreign holders of French assets. This accelerated capital outflow had been triggered by the widespread expectation of a strong devaluation (15 to 20%).

By its own choice, the government had put itself at a crossroad: either save the exchange rate by renouncing the modest New Deal or save the economy by renouncing the hard currency principle.

The first way was chosen! A new long run shock therapy deflation plan was imposed for at least five years. For the first time since 1945, a government explicitly decided to force a rise in unemployment out of the targeted harsh squeeze of aggregate demand both public expenditures and mainly consumption. I do think that the Mitterrand shock therapy has no equivalent elsewhere (abstraction from IMF adjustment programs) but the shock therapy imposed on Russia in the early nineties.

The outcome was catastrophic both in the short-run and in the long run. The government was finally obliged to devalue the currency and, next, had to increasingly reinforce the shock therapy to freeze the exchange rate. As shown by Bliet and Parguez (2006) the French economy (and society) never recovered from the strait jacket in which it was jailed. From 1983 onwards, expectations turned more and more pessimistic both for firms and household and for banks themselves.

Ultimately, there remains a question: why did the French government by its own will and without any remorse took the deflation avenue without any opposition? Again, contrary to the conventional wisdom, the so-called experts who framed the economy policy had never been “Keynesians”. Jacques Attali, the leading economic advisor and his team as soon as the mid seventies had embraced a weird neo-Marxist version of the ruling French Economic Ideology, mixing Hayek, Rueff, a crude ultra-ricardian Marxism (Blick and Parguez 2007b, 2008) extolling the virtue of thriftiness to attain in the very long run the perfect rational capitalist economy. They approved the purpose of the Barre deflation but they believed that the plan was too soft to meet its target. Herein was the long run agenda requiring a strong growth of investment out of the growth of profit. Led by their ricardian-agrarian vision of Marxism, they ignored the profit identity and thereby targeted a dramatic fall in the labour share to raise profits.

For political reasons, the Government had to reflate but as soon as possible the New Deal should be abandoned, the opportunity was the exchange rate crisis. In its obsessional fight to abide by the hard currency principle the socialist administration complied with the Rueff postulate: a strong currency is to be imposed to attain the long run equilibrium. The ultimate explanation of the shock therapy turn was the dream of European monetary unification requiring fixed exchange rates.

The conclusion is straightforward: the French lesson is teaching the truth of the Monetary Circuit theory core principle!

II/ The explanation of unemployment: the false trade-off between Unemployment and inflation

II-A What is unemployment?

II-A-1 It accounts for individuals who cannot find a job providing them with the monetary income fitting the consumption long run expectations. Unemployment is thereby encompassing:

- those who are officially without income generating job
- those who are forced to live on the so-called social minimum whatever
- those who are forced to retire before the legal retirement age
- at least those obliged to survive on marginal incomes out of part-time jobs,
- ...

Such an encompassing definition leads to the notion of under-employment or waste of the labour force. It helps to discover the true and dramatic impact of unemployment especially when one strives to compare dynamic eco-

nomics like the USA to non-dynamic societies like the Euro Zone and especially France. According to Mishel, Bernstein and Allegreto (2007 in their last edition of “the State of Working America”, p. 230.) in the USA the rate of underemployment varies exactly like the official rate, the ratio being rather constant (around 2/1). It means that the official rate being strongly anti-cyclical, the same is true for the rate of underemployment. As shown by Blik and Parguez (2006, Giovannoni and Parguez (2007b) in France the effective rate of unemployment, taking care of the increasing situations of hidden unemployment, never stopped to rise relative to the official rate at least since the late seventies. It reflects what has been deemed the “social therapy of unemployment” which became official long term policy in 1983 when the Government officially targeted on increase in unemployment. Today, the divergence is more striking than ever as shown by Table 1 measures in percentage of the potentially working population:

	USA (2006)	France (2006)
Official rate		
Of unemployment	4.7%	10%
Rate of underemployment or effective rate of unemployment	8,5%	at least 36%

Contrary to the USA, there has been in France a long-run growth of effective unemployment (from around 1967 onwards) reflecting both the rise in official unemployment and the accelerated growth of disguised unemployment under the cover of the “Social therapy” (Parguez and Giovannoni, 2007b).

II-A-2 From this definition one must derives three propositions leading to three explanation of unemployment:

1. Unemployment only exists because firms decide to pay a labour income which is inferior to the level that would exempt household from rationing in their long run consumption expectations. Let W^0 be this level reflecting that must be deemed full-employment, unemployment exists if and only if W the effective amount of labour income reflecting long-run expectations is lower than W^0 . Such a definition does not contradict the access of household to money. Household do not feel constrained as long as in the long run they expect that W is to be adjusted to W^0 , or rather that the growth rate of W fits the growth rate of W^0 .
2. In a positive monetary economy, there cannot be a supply of labour curve because earning an income is a constraint and not a choice. It is

enough to dismiss the dubious notion of a “labour market” and thereby all explanations of unemployment in terms of supply of labour rigidities. Stockhammer (2004) provides a robust empirical proof of the inexistence of these “rigidities” as the cause of long-run rise in unemployment in Europe.

3. There cannot be a trade-off between the level of real employment L in labour-unit and the money wage rate, W . Household long run expectations being motivated by the growth of desired consumption expenditures, is the exogenous driving variable for their desire for income. It determines both the desired or required growth of employment and the required rate of the wage rate or base unit income. In an economy where employment is directly under the control of firms, the wage-rate plays a role of some last resort anchor of household expectations. Herein lies the relative long run exogeneity of the effective growth rate of the wage rate (Giovannoni, 2006a). It means that attempts to prevent a fall in the growth of w are perfectly sensible and operate convergence whatever.

II-B The Employment function

The existence condition of unemployment in the monetary economy is that the effective labour income W is entirely determined by firms according to their own expectations endorsed by banks, while the required or full-employment labour income is entirely determined by household long-run expectations.

II-B-1 Let $P(e,t)$ and r^* be expected profits for t and the required rate of profit defined as the ratio of expected profits to labour income, the employment function is:

$$W_t = 1/r^* P(e,t) \quad (11)$$

It displays the following characteristics:

II-B-2 $1/r^*$ plays the role of the employment multiplier to be substituted in a monetary economy for the Keynesian multiplier. It answers the question firms have to raise in the context of an absolute unknowability of the far future. Taking care of their short run expected profits, what must be the level of employment and thereby output fitting those expectations. The more they are confident in the future without reversal of expectations the higher is to be employment. It means that firms fear expectations failure leading them with excess capacity in terms of labour requiring costly employment reduction and generating capital losses because of the induced excess capacity of equipment. In their effort to meet their profits expectations banks are to include the r^* factor in their credit-

worthiness norms. Since r^* embodies firms and banks ability to bet on the future and doing so fight with unknowability, r^* is to be a constant over time as long as there is not a dramatic reversal in the shared “vision” of the future.

II-B-3 As already shown, profits expectations depend on expected growth of consumption and expected growth of public expenditures. Minimizing expectations failures requires an adjustment of household and firms expectations. Herein lies what must be deemed the true “dynamic virtuous process” of the monetary economy: access to money of household leads firms to legitimate household expectations by providing them with the required income out of their own expectations of consumption. Let r° be this rate of profit fitting private adjustment of expectations; r° is the rate of profit fitting full employment. The existence condition of such an adjustment is the growth rate of public expenditures, the ultimate anchor of the whole set of expectations. It must be high enough and stable enough to lead firms to be more and more optimistic about the future, which may lower r^* until it attains its full employment level r° .

II-B-4 Ultimately the employment multiplier is an exogenous variable determined by the State, fiscal policy playing the dominant role. This conclusion perfectly holds in the open economy since the State through its deficit may compensate for the negative impact on expectations of the trade deficit. From the determination of r^* stems the share of profits m^* , since

With $R=nY$ (12)

$$m^* = P/Y = (1-n) r^*/1+r^* \quad (13)$$

m^* is determined by fiscal policy for a given monetary policy controlling l . Herein lies the generalization of the crucial discovery of Kalecki, this distinction between the amount of profits and the share of profits:

-There exists a required share of profits m^* which is strictly exogenous because it is policy determined. It means that the effective share of profits m fluctuates around the m^* level. Exogeneity reflects the unknowability of the future effective expectations in a monetary economy. It has nothing to do with the “degree of monopoly”, the “state of competition” which had been emphasized by Kalecki as the main determinant of m^* .

-In the short run both profits variables are independent.

-As already emphasized by Kalecki any attempt to raise the share of profits sustained by a misleading policy is to decrease the labour income and thereby consumption. The drop in expected profits is to generate a fall in expected profits out the sustained fall in effective profits.

II-B-5 We are led to the conclusion that in the monetary economy unemployment is both the “natural state” and always and fully “involuntary”. It is “natural” because without a proper and long-run macro-economic policy household expectations will never be adjusted to firms and banks expectations. Together firms and commercial banks expectations are unable to frame the optimistic vision of the future meeting household expectations. By its very nature, unemployment is involuntary because it embodies the rationing of household.

To curb unemployment, there is again no trade-off between L and w , whatever the mechanism of the trade-off, drop in the growth rate of w paid to jobholder or social therapy “à la française” (the so-called ‘French model’). It means that the labour income generated by the employment function generates a unique couple w, L). A drop in the effective income unit (or its growth rate) relative to productivity is to engineer cumulative and strongly negative wealth effects. It is enough to dismiss once for all the so-called “Keynes effect”.

II-C The False trade-off between Employment and Inflation

II-C-1 A tragic story

I agree with Galbraith-Darity (2005) and Parker (2005) interpretation of the demise of mainstream Keynesianism and the failure of all heterodox schools to debunk new mainstream macro-economics whatever. All of them since the start embraced and still embrace the postulate that there is a trade-off between inflation and full-employment. Endorsing the Phillips curve was a recipe for disaster; it could not make sense of the so-called “stagflation”. It initiated the whole NAIRU debate and led to the conclusion that whatever the explanation there was an inflation barrier to full employment policies. Herein is the origin of attempts to remove the Barrier by imposing the so-deemed “income policy”, the genuine “wage-policy” (if not wage-police) to get rid of the threat of the “Unions menace”. There were very few dissenters to the Trade-off consensus like Eisner (Parker op cit) in the USA and Jean de Largentaye in France (Blick and Parguez 2006) but they are still ignored and the trade-off consensus rules.

II-C-2 It is time to doubt the Trade-off which is contradicting the whole positive theory of the monetary economy. Such an effort came to my mind because of a crucial discovery by Olivier Giovannoni (2007b) Studying the relationship for the USA from 1954 to 2006 between inflation and the rate of unemployment he found that there may exist a very stable and perfectly positive relationship between inflation and unemployment. He relies on official measures of unemployment but, as already proven they make sense for the USA. The relationship seems to be a long run one taking the form of a cointegration straight line explic-

itly showing that decrease (increase) in the rate of inflation is associated with decrease (increase) in the rate of unemployment without any significant threshold. As such it is enough to dismiss once for all the trade-off and the NAIRU whatever.

Applying long-run causality tests leads to what could be a puzzling conclusion: causality goes from a drop in inflation to a drop in the rate of unemployment. Couldn't be some comfort to the European Central bank? Not the least because other long run causality tests prove without any ambiguity that employment is strongly led by growth and that growth is led by the exogenous demand variables, consumption and public expenditures which reflects the long run commitment of the State to full employment. From this twin causality relationship I draw a tentative explanation of the Giovannoni straight line. It unveils an inverse long run causal relationship between the growth of aggregate demand sustained by the State long run policy and long run expected inflation. It is rooted into the following process: the more firms are led to expect a sustained growth of aggregate demand the more they are led to expect a long run drop in expected inflation; thereby to meet or realize those expectations they have to increase output and employment. To sum up it is true that an expected drop in inflation requires an effective increase in employment which accounts for the fall in the rate of unemployment.

II-C-3 What remains is to explain why the inverse long run causality between the growth of aggregate demand and inflation is perfectly germane to the monetary economy described by the theory of the monetary circuit.

Let p and a be respectively in each period the unit price of aggregate private domestic output and the average productivity of labour, it leads to the price identity

$$paL=Y \quad (14)$$

in which p accounting for the average of production domestic prices whatever, reflects the required price determined by firms to attain their profits expectations. Firms have to fix a price allowing them to recoup as receipts or value (Y) the sum of their expected costs and required profits.

Costs have two components in a monetary economy:

- the income component encompassing the wage bill and for reasons already explained the net interest income.
- the capital losses J generated by a rate of equipment utilization below its normal rate reflecting the full employment level. Let j be the rate of expected J to real output.

The operational price identity becomes

$$paL = wL(1+r^*)(1+n) + J \quad (15.1)$$

$$p = w/a(1+r^*)(1+n) + j \quad (15.2) \text{ with } j = J/aL$$

The impact of imports and thereby of the exchange-rate does not explicitly appears because it is already included in the J , j components. n and r^* being exogenous policy parameters of which changes generate only a once for all shocks, from the price identity stems the fact that there can be only two cause of inflation, a sustained increase in unit labour cost w/a and a non-compensated increase in j .

Let us assume henceforth a state long run macro economic policy targeting full employment and therefore stabilizing r^* and n at their full employment levels r^0 and n^0 . What can be its impact on the two potential causes of inflation.

1. The first is the long-run rise in j : j varies positively with the excess of the normal rate of equipment utilization over its effective rate. There is a perfect correlation between the rate of equipment utilization and the rate of unemployment, the first always falls when the second rises as documented by Galbraith (1998) and authors of "the State of Working America" (op cit). It leads to the notion of "global capacity" (Giovannoni 2006) which excludes factors substitution at the macro economic level. The normal rate of equipment utilization reflects therefore full employment of the labour force while the excess of the normal rate over the effective rate reflects the rate of unemployment.

It is perfectly sensible to assume that j varies always positively with the rate of unemployment. The conclusion is straightforward:

- A rise in the rate of unemployment causes a rise in j and therefore inflation
- A policy targeting full employment is to generate a drop in j which gets rid a cause of inflation

Since the effective rate of unemployment reflects the discrepancy between the effective growth of labour-income and its full employment level, one cannot doubt the conclusion:

A full employment policy adjusting the growth of labour income to its full employment level stabilizes the economy by removing the "capacity of inflation".

Since a rise in the rate of interest out of monetary policy has a negative impact of consumption and thereby investment one may drive an important corollary: there is an inverse relationship between the rate of interest and the rate of capacity utilization. Thereby a rise in the rate of interest (drop) increases the j factor (decreases) measuring the capacity inflation.

2. The second cause is a long run growth of the unit cost of labour is induced by a growth rate of the money average wage greater than the growth rate of productivity. It could result from two factors:

- an exogenous push for an excess growth rate of the money wage generated by Unions and State legislation.

- the competition between firms to attract scarce labour as the economy converged to full employment

2.1 The first factor is to be strongly doubted for at least three reasons. In a services led economy Unions only survive in the hard core manufacture sector. Let us assume as suggested by Galbraith (1998) that the money wage in the hard industrial core lead the whole structure of wages and therefore the average wage rate. The Unions push story ignores that a full employment policy automatically pushes for increased investment and therefore for the embodiment of more and more technology-innovations in the stock of equipment. It is tantamount to the proposition that a full employment policy sustains the growth of productivity in the long run. The last reasons lies in the deep misunderstanding of the nature of household expectations and the role of the Unions as the “conscious or planning agency” of labour. They ask for money wage hikes if and only if they are certain that two conditions are met: on one side those hikes are required to attain the growth of income sustaining consumption expectations; on the other side they are to provide an increase in the real wage accounting for the expected growth of purchasing power. Herein is the explanation of the inexistence of any “monetary illusion” for unions, the same being true for all other groups. Postulating monetary illusion for household has been a dangerous mistake of the wage-led inflation school. It ignores the fact that, as shown by John K Galbraith (2007) behind the veil of the Market the modern monetary economy is a set of planning agencies striving to get the maximum information on each other and the State long run policy. Unions cannot ignore either the price identity leading firms own planning agencies or the State long run goals. The wage led inflationschool confused two propositions:

- household do not directly determine the real wage rate which is true.

- household, as soon as they are organized are indifferent to the real wage and do not take care of firms long run planning which is not true.

It is therefore straightforward that the more the economy converges to full employment the less existence conditions of wages-hikes decreed by Unions vanish. On one side household rationing disappearing, the incentive for imposing wage-hikes is itself disappearing. On the other side Unions get the information that productivity growth attains its limit, which implies that wage-

hikes have a vanishing positive impact through the growth of consumption on productivity. The conclusion is again straightforward:

A long run full employment policy nullifies the first factor of the wage-inflation. As long as the trade deficit is compensated in a floatable-exchange rate economy by the State deficit, the growth of consumption foreign goods at relative cheaper price strengthen the conclusion. It engineers an automatic rise for a given rate of growth of the money wage rate. It should be the final proof of both the necessity and the perfect feasibility of a full employment policy in the contemporary world economy.

2.2 The scarcity factor is also to be strongly doubted in the modern monetary economy. Why would firms planers increasingly bid up for labour through wage hikes while they must know that they can no more realize a significant increase in their rate of growth? The scarcity factor ignores that as the economy moves towards full employment firms obtain their maximum rate of utilization of available global capacity, herein lies a true “real supply constraint”. Ignoring the global capacity barrier hides again a postulated monetary illusion on behalf of firms which is indeed not germane to their very nature of real net worth accumulation, planers which explain as shown by 15.1 and 15.2 that they target ultimately real profits.

II-C-4 The Giovannoni straight line and the underlying theory of inflation makes full sense of a crucial historical period : the famous stagflation of the seventies and the French case from the late seventies onwards.

1. The seventies are a perfect case study! The sharp fall in growth and the resulting rise in unemployment was the outcome of at least two reasons:
 - the succession of sharp shocks on expectations generated by to waves of oil hikes price and other raw material price. They sharply increased the “threat of uncertainty” the feeling that the future was unknowable. This dramatic change in firms expectations imposed a deep change in the investment function reflected by a drop in the growth rate of investment relative to the growth rate of consumption. Firms started to bet on excess-capacity and they strove to prevent it.
 - the expectations shock would not have been that dramatic had the government maintained a coherent long run policy aiming at full employment. Since the early seventies, before the oil shocks they already abandoned their long run commitments and macro-policy did not play any more its anchor role. The Nixon and Carter Administration were obsessed by inflation and the threat of inflation. Their chaotic ways could not provide guiding information leading to an optimistic future. Con-

trary to a dominant way, I think that getting rid of the ailing Bretton Woods system was a very sensible decision but the opportunity was lost! Elsewhere the situation was worse. Great Britain, France and Germany were already rejecting full employment for the very sake of maintaining a fixed exchange rate and a grossly over-valued one especially for Great-Britain and France.

2. The accelerated fall in growth rates had obviously a significant impact on the rate of equipment utilization which triggered the capacity-inflation factor as firms desperately endeavoured to save their profits. On the other side, it is true that in the course of the period, there were waves of wage-hikes (especially in France, Great-Britain and USA) They were desperate attempts (some last resort effort) by Unions to compensate for the fall in real income resulting from lower growth and therefore save minimum there level of consumption. They failed because they could not raise consumption so strong was the change in expectations, the sole outcome was indeed income inflation because productivity was frozen by the vanishing inducement to invest.

Ultimately, the seventies prove that a wrong and widespread State policy caused “stagnation” as shown by Blieg and Parguez (2007-2008). From 1983 onward, the French government planned what has been “disinflation” as a crucial part of his fixed exchange-rate strategy, fall in French relative prices was expected to promote exports. Cumulative Russian-like shock therapy imposed a strong drop in the rate of capacity utilization reflected by the accelerated rise in the effective rate of unemployment, its sensible proxy. There is an effective unemployment threshold, the exploitation threshold beyond which the labour unit cost is to collapse. On one side firms may impose a fall in the growth rate of wage-unit while raising productivity out of more effort imposed on labour for the sake of efficiency. Firms planners followed this strategy and trespassed the exploitation barrier because it was highly praised if not imposed by the government. Politicians had been convinced by “experts” of the necessity of raising the share of profits to raise profits, the official French broth to be deemed the Hayeko-Ricardo-Marxian French Way (HRMF) of dealing with the economy. With a n factor raising out of monetary policy, raising m^* seemed to require a fall in the real wage ratio to productivity and thereby a fall in the growth of w relative to the growth rate of productivity. Meanwhile the capacity inflation accelerated but it was much more compensated by the labour cost deflation, which explains the effective drop in inflation. Such an outcome does not falsify the price identity 15.3 and the Giovannoni relationship. Indeed the share of profits sharply increased during the Mitterrand era as n , the share of

“Rentiers” rose, which reflects a dramatic collapse of the labour income share, the proof of increased exploitation (Ederer and Stockammer 2007).

It just proves that there are two ways of dealing with inflation:

-The dynamic way! The State is committed to full employment which abolishes incentives to inflation

-The deflation or poverty way! The State plans the rise in effective unemployment to force a drop in inflation out of an increase of poverty.

The first way is obviously the role germane to a modern monetary economy. It is the golden path. Money is endowed with value by the creation of real wealth it engineers. It is tantamount to the proposition that the value of money is proportional to employment and therefore inversely related to the effective rate of unemployment.

What is true inflation but the loss of value of the currency. In a dynamic economy value is correctly reflected by the long run growth of the price level. In a poverty-addicted economy, the forced drop in effective inflation is the veil of a loss of value of the currency, some hard-core inflation.

The positive causal relationship expressed by 15.3 is therefore general in its explanation of true inflation.

Conclusion :

The State is the existence condition of a stable monetary economy.

It has been proven that Governments have to target full employment as their priority and that they are perfectly free to do so. The so-called constraints or barriers invoked by politicians (whatever their denomination) and economists (whatever their orientation) do not exist at all. They are self imposed constraints, the dark progeny of deeply misunderstood self-interest of groups in power and, maybe more, blithe ignorance or misunderstanding of the core principle of the modern capitalist economy which is a pure monetary economy. On this fundamental question, Keynes was right but the “academic scribblers” he invoked are not just right wing “defunct economics”! Herein must be the provisional main conclusion of the theory of the monetary circuit: money exists to remove the absolute scarcity constraint for all groups; it exists to create the future out of today expectations; it exists to remove once for all the older Robin Hood economy when what some got was lost by other. It can easily be proven that in the no Robin Hood economy, the so-called Pensions Horror cannot exist (Bliek and Parguez 2006). Pensions are paid by firms and the State as a part of their ongo-

ing expenditures realized by money creation. They generate an equal increase in consumption leading to a rise in aggregate gross income on which contributions and taxes are raised. Abstracting from dubious assumptions on the nightmare of an “aging population”, an excess of pensions-income over contributions and induced taxes is reflected according to the fundamental identity by an increase in firms net profits.

Who could thereby doubt the conclusion: Finally it is true that the State is the existence last resort condition of the monetary economy but for the better or the worse. The State plays in harmony with the core principles like a true Maestro or it may play against them and the orchestra turns into an horrendous cacophony!

List of Symbols

Y	Net value added in money units
C	Consumption
I	Private investment
G	Aggregate State expenditures
T	Taxes
E	Exports
M	Imports
g	Budget deficit
B	Trade deficit
Dh	Household debt
W	Wage bill (private) net of taxes
P	Aggregate profits net of taxes
R	Net interest income net of taxes
n	Share of R in Y
Sh	Household net savings
Se	Firms net savings
Sf	Foreign net savings
Sr	Rentiers net savings or banks net profit
r*	Rate of profit (targeted)
m*	Share of profits (targeted)
a	Average labour productivity
L	Real employment
w	Money-wage rate
r	Price of domestic output (targeted)
J	Capital losses induced by too low a rate of equipment utilization
j	Ratio of J to real output
z	Exchange rate
U	Effective rate of unemployment
U0	Zero effective rate of unemployment

Bibliography

- Accoce, JV and Mouakil T (2007) "The Monetary Circuit Approach: A stock-flow Consistent Model" in *Money, Distribution and Economic Policy* Eckhard Hein and Achim Truger (eds) Edward Elgar Cheltenham 2007
- Bliek, JG and Parguez, A (2006) *Le Plein emploi ou le chaos* Economica Paris
- Bliek, JG and Parguez, A (2007) "Full Employment for Europe" *International Journal of Political Economy* fall 2007
- Bliek JG and Parguez, A (2008) "The Mitterrand 1983 economic U turn: the untold story" in *Challenge*, March-April
- Domar E (1957) *Essays in the Theory of Economic Growth* Oxford University Press
- Ederer S and Stockammer E "Wages and Aggregate Demand: an Empirical Investigation for France" in *Money, Distribution and Economic Policy* Eckhard Hein and Achim Truger (eds) Edward Elgar Cheltenham 2007
- Eisner R (1983) "Which way for France?" *Challenge* July-August
- Eisner R (1994) *The Misunderstood Economy* Harvard business School Press Boston
- Galbraith James K (1998) *Created Unequal* NY; The Free Press A Twentieth Century Fund book
- Galbraith James K, William Darity Jr (2005) *Macroeconomics* VSSD Netherlands
- Galbraith James K (2006) *The Keynesian Devolution* The Jerome Levy Institute
- Galbraith James K, Giovannoni Olivier G, Russo Ann J (2007) *The Fed's Real Reaction Function: Monetary Policy, Inflation, Unemployment, Inequality and Presidential Politics*, UTIP working paper n°42 presented before the House Financial and Banking Committee July 17 2007
- Galbraith John K (1967/2007) *The New Industrial State* Princeton University Press
- Giovannoni O (2006) *Répartition et croissance économique : application aux Etats-Unis* Thèse de Doctorat en Sciences Economiques Université de Nice
- Giovannoni O (2007a) *American growth: stochastic interpretation à la Samuelson* by Galbraith submitted to the journal of economic behavior and organisation
- Giovannoni O (2007b) *Empirical study of the relationship between unemployment and inflation the case of the American economy*
- Giovannoni O and Parguez A (2007a) "What Drives Profit?" in *Money, Distribution and Economic Policy* Eckhard Hein and Achim Truger (eds) Edward Elgar Cheltenham
- Giovannoni O and Parguez A (2007b) *Social Therapy of Unemployment against Full Employment Policy*, paper written for the International Conference on Social Models, Center for European Studies, University of Texas at Austin
- Juselius K (2006) *The Cointegrated Model Methodology and Applications* Oxford University Press London New York
- Kregel J (2006) *The Monetary Circuit and the Monetary Production Economy*, working paper University of Missouri at Kansas City
- Lindley D (2007) *Uncertainty* Doubleday, New York, London
- Mishel L, Berstein J and Allegreto S (2007) *The State of Working America* The Economic Policy Institute Cornell University Press Ithaca NY
- Parguez A (1998) "The Roots of Austerity in France" in *Restoring Demand in the World Economy* Halevi J and Fontaine JM (eds) Edward Elgar

- Parker R (2005) John K Galbraith his life, his politics, his economics The University of Chicago Press : Chicago
- Parguez A (2002) “A Monetary Theory of Public Finance” International Journal of Political Economy vol 25 n°1
- Parguez A (2003) “The persuasive Saving constraint in Minsky Financial Instability Theory: Minsky as an Hayekian Post Keynesian” in Louis Philippe Rochon and Rossi Sergio (eds) Modern Theory of Money Edward Elgar
- Stockammer E (2004) The Rise of Unemployment in Europe A Keynesian Approach Edward Elgar Cheltenham